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THESIS

**POWER AND ENERGY: GEOPOLITICAL ASPECTS OF
THE TRANSNATIONAL NATURAL GAS PIPELINES
FROM THE CASPIAN SEA BASIN TO EUROPE**

by

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June 2010

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TRANSNATIONAL NATURAL GAS PIPELINES FROM THE CASPIAN SEA
BASIN TO EUROPE**

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Submitted in partial fulfillment of the
requirements for the degree of

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ABSTRACT

This study examines the geopolitical rivalry over control of the Caspian Sea basin natural gas resources and the transportation routes among four world powers—Russia, the European Union, the United States, and China. The author assesses the risks posed by instability in the Caspian Sea states to the realization of proposed natural gas pipeline projects in the region. Russia's role and strategy as a key player in the Caspian Sea region is analyzed, with a focus on its natural gas reserves and pipeline transportation system, which it is using not only for economic reasons but for political purposes to regain its lost status on the international scene. The study also evaluates the impact of individual states' conflicts of interest on the choice of natural gas transportation routes to Europe.

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TABLE OF CONTENTS

I.	INTRODUCTION.....	1
A.	BACKGROUND	1
B.	SCOPE AND PURPOSE.....	6
C.	RESEARCH QUESTIONS.....	6
D.	HYPOTHESIS.....	6
E.	METHODOLOGY	7
F.	LITERATURE REVIEW	9
G.	ORGANIZATION OF THE STUDY.....	10
II.	THE CASPIAN SEA BASIN	13
A.	IMPORTANCE OF THE CASPIAN SEA BASIN ENERGY SUPPLIES	13
B.	UNSETTLED LEGAL STATUS OF THE CASPIAN SEA	18
C.	INSTABILITY OF THE REGION.....	19
1.	Historical Background and the Failed Attempt to Create a Turkic Nation-State	20
2.	The Emergence and Crises of Nation-States in Central Asia and the Caucasus after the Dissolution of the Soviet Union	22
III.	POWER RIVALRY OVER THE CASPIAN.....	25
A.	POWER RIVALRY OVER THE CASPIAN NATURAL GAS.....	25
1.	Russia	28
2.	The United States	28
3.	China	29
4.	European Union	29
B.	POWER RIVALRY OVER THE NATURAL GAS TRANSPORTATION ROUTES	33
IV.	RUSSIA’S ROLE.....	41
A.	RELATIONS BETWEEN RUSSIA AND THE CENTRAL ASIAN AND THE CAUCASIAN COUNTRIES.....	41
B.	RUSSIA’S “ENERGY WEAPON” TO STRENGTHEN ITS INFLUENCE.....	45
V.	CONCLUSIONS	49
	LIST OF REFERENCES.....	53
	INITIAL DISTRIBUTION LIST	57

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LIST OF FIGURES

Figure 1.	Existing and planned natural gas pipelines in Europe. From: Eastern European Gas Analysis, www.eegas.com/maps.htm , 2009.....	4
Figure 2.	Theoretical Framework.....	5
Figure 3.	Players and their relations in the geopolitical game over the Eurasian energy control	9
Figure 4.	World natural gas reserves by geographic regions as of January 1, 2009. From: <i>Oil & Gas Journal</i> 106, no. 48, 2008.....	14
Figure 5.	The Caspian Sea basin countries (Caucasus and Central Asia). From: U.S. Central Intelligence Agency, http://maps-world.net/central-asia.htm	15
Figure 6.	World Natural Gas Consumption 1980–2030. From: Energy Information Administration, http://www/eia.com	25
Figure 7.	Nabucco Gas Pipeline Project. From: http://nabucco-pipeline.com/project...	34
Figure 8.	South Stream pipeline project. From: http://south-stream.info	36
Figure 9.	Nord Stream pipeline project. From: Wikipedia, http://en.wikipedia.org/wiki/File:Nordstream.png	37
Figure 10.	Russia's periphery. From: Strategic Forecasting, Inc., www.stratfor.com	42
Figure 11.	World's Gas Reserves by Country. From: <i>Oil & Gas Journal</i> , Jan 1, 2010	46

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LIST OF TABLES

Table 1.	Estimated hydrocarbon reserves of the most important hydrocarbon producers of the post-Soviet region. From: BP Statistical Review of World Energy, June 2008.....	16
Table 2.	Energy consumption, imports and energy dependency of the European Union countries. From: http://www.energy.eu/#dependency	31

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I. INTRODUCTION

A. BACKGROUND

Eighteen European countries were affected when the state-controlled Russian natural gas consortium, Gazprom, cut natural gas supplies to Ukraine in January 2009.¹ Following a diplomatic war between Russia and Ukraine, which entailed reciprocal expulsions of diplomats, the Russian President Dmitri Medvedev sent a letter of complaint to the Ukrainian President, Viktor Yushchenko, on August 11 of that same year. Medvedev accused his Ukrainian colleague of bringing relationships to “unprecedented lows.” Medvedev also declared that he was delaying the sending of a new Russian ambassador to Kiev until their interstate relations improved.

In his response, Yushchenko criticized the Kremlin for interfering in Ukraine's foreign policy decisions.² Escalation of Russian–Ukrainian relations is a part of a complex geopolitical *Great Game* with numerous *players* for the control and transportation of energy resources. However, the recently elected Ukrainian President, Viktor Yanukovich, is considered to be pro-Russian—counter to his predecessor, Yushchenko—and he is not only likely to improve relations with Russian leadership. He is expected to continue using the strategic geographical position of Ukraine in the transportation of Russian natural gas exports as a bargaining chip to obtain lower natural gas prices from Russia.³

Since early 2000, energy policy has become one of the most important topics in the European Union (EU), evident in the organization's formulation of a new policy

¹ A similar cut-off of natural gas to Europe occurred at the beginning of 2006.

² Az új orosz nagykövet egyelőre nem megy Kijevbe (The new Russian Ambassador temporarily does not go to Kiev)” (MTI, 2009), http://www.echotv.hu/index.php?akt_menu=73&newsid=128414 (accessed Sep 15, 2009).

³ Current President of Ukraine Viktor Yanukovich was inaugurated on Feb 24, 2010, having won presidential elections with 48.95% of the vote against Yulia Tymoshenko's vote of 45.47%. Ukraine and Russia recently agreed on new gas prices based on the proposals of Ukrainian President Viktor Yanukovich, the goal of which was to reduce the current price of \$305 based on the agreement of Jan 19, 2009, between the two countries after the gas crisis. (“Ukraine satisfied with Russian gas prices negotiations,,” Apr 16, 2010) <http://en.rian.ru/exsoviet/> (accessed Apr 17, 2010).

named “energy-diplomacy.” Energy policy is increasingly related to security⁴ and is one of the most referred economic challenges of recent times. The renewed spotlight on energy security is motivated by variable oil prices, instability in some of the exporting and transiting countries, geopolitical rivalries, risk of terrorism, competition for limited resources, and energy demands for economic growth.⁵ For the EU, the question is whether sufficient resources of oil and natural gas will be available, and how securely these supplies will reach European markets.

Presently, 88 percent of Europe’s energy is fossil fuel, and it is projected that, by 2030, this amount will increase to 90 percent.⁶ Over that period, the quantity of natural gas consumed in Europe will constitute 30 percent of the fossil fuel energy.⁷ European gas needs are likely to increase significantly, while the European gas production will likely continue to decline.⁸ The foreseen critical role of natural gas has forced the EU to pay attention to former Soviet regions, especially Russia. The greatest dependants on Russian gas are Germany, Italy, and post-Soviet countries like Ukraine and Belarus, or the Baltic states, and the countries of Central and Eastern Europe.⁹ The EU–Russia interdependence is reciprocal: the Russian economy is based on exports of raw materials, mainly oil and gas, to Europe, while Europe heavily relies on Russian gas.

Europe imports most of its natural gas, of which two-thirds comes from the Russian Gazprom, the biggest producer of gas in the world. Russian gas is transported to Europe through the ex-Soviet pipeline network, and 80 percent of this gas goes through Ukraine. The Russian–Ukrainian confrontation in the post-Cold War era, which has

⁴ Ludvig Zsuzsa, “Az Európai Unió és a FÁK-országok közötti ‘energiadialogusok’ – Fókuszban a szénhidrogén szállítások (‘Energy dialogues’ between the European Union and CIS countries – in focus hydrocarbon’s transportation),” 97, http://www.vki3.vki.hu/kke_4_ludvig.pdf (accessed Jan 25, 2010).

⁵ Daniel Yergin, “Ensuring Energy Security,” *Foreign Affairs* 85, Mar/Apr 2006), 69, <http://proquest.umi.com.libproxy.nps.navy.mil/pqdweb?index=2&sid=3&srchmo> (accessed Sep 15, 2009).

⁶ Europe’s Energy Portal, “Energy Dependency,” <http://www.energy.eu/#dependency> (accessed Dec 26, 2009).

⁷ In 2030, Hungary is expected to import 96.3 percent of its gas requirements.

⁸ Main producers are the UK, the Netherlands and Norway.

⁹ BBC News, “European Gas Supply Disrupted” (BBC News, Jan 06, 2009), <http://news.bbc.co.uk/2/hi/europe/7812860.stm> (accessed Feb 16, 2009).

culminated in a continuous gas dispute between Moscow and Kiev over the gas supplies, prices, and debts, which, accompanied by cuts of gas supplies going through Ukraine, endangers European energy security.

Both the Russian near-monopoly in the European energy import and the Russian-Ukrainian conflict have forced Europe to rethink its energy security policy, with the main purpose of avoiding strategic dependence on Russia. Huge resources of gas are available in the Caspian Sea basin. The challenge, however, is transportation of that gas to European markets, because the intention of the European Union is to bypass Russia in a bid to diversify the transportation routes of its natural gas imports. Over the past 10 years, energy transportation has been a critical political, economic, and national security issue in Europe. The instability within some of the countries that the existing pipeline and the proposed pipelines are crossing, and likely will cross, may disrupt the energy supply.

The reliability of the supply and transportation of natural gas has forced both Russia and the European Union to plan for new pipeline projects: Nabucco, Nord Stream and South Stream—in addition to the existing transit routes (Figure 1).

The EU plan is to reduce strategic dependence on Russia's gas supplies; on the other hand, Russia is determined to circumvent the insecure supply routes running through Ukraine. The Nabucco is the European Union's official project, while Russia is the main stakeholder for the Nord Stream and the South Stream pipeline projects. The South Stream is the rival project of Nabucco, launched by Russians to impede the European Union's pipeline plan. In all, Russia is focused on realizing new gas pipeline routes along the existing ones in order to secure its energy export to Europe by circumventing Ukraine.

The decision on whether to implement the Nabucco, Nord Stream or Southern Stream gas pipeline projects is causing conflicts of interest among the EU countries, Russia, the United States, China, Turkey, and Central Asia countries. The realization of these projects is likely to change the dynamics of power in the region. Currently, EU countries depend on Russia for both energy and its transit, a situation that Russia has

exploited to increase influence in Europe and traditional areas of interest: the post-Soviet republics in which Moscow lost its positions after the dissolution of the Soviet Union.

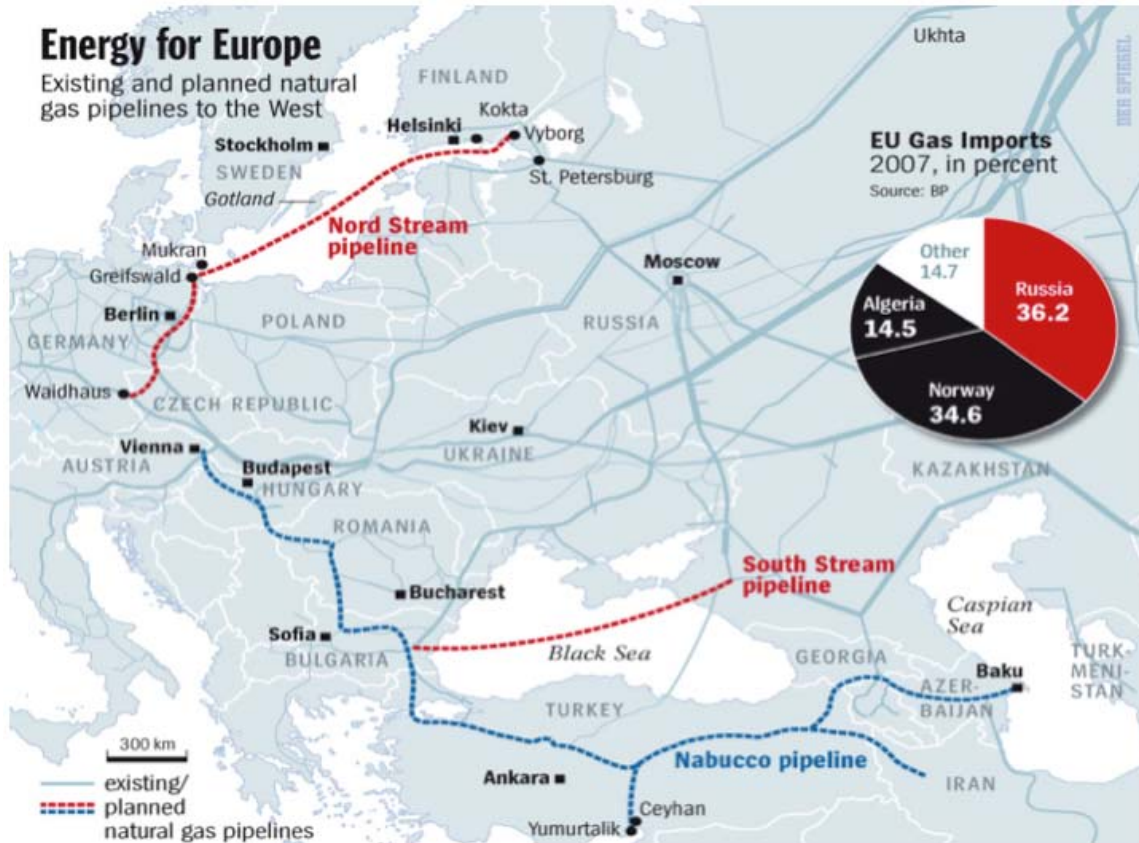


Figure 1. Existing and planned natural gas pipelines in Europe. From: Eastern European Gas Analysis, www.eegas.com/maps.htm, 2009

In the 1990s, the United States (U.S.) had accentuated interest towards the Caspian Sea basin natural gas reserves as an alternative to Persian Gulf reserves.¹⁰ As the U.S. energy consumption leans towards domestic non-conventional gas, its interest in the Caspian Sea and Central Asia may be described as more political than economic. The value of the Caspian Sea basin and Central Asia for the United States is mainly in their geostrategic position close to Iran, Afghanistan, Pakistan, and in addition, to their location in the Russian sphere of interest. In part, the U.S. recognizes that Russia's

¹⁰ Yergin, "Ensuring Energy Security."

monopoly of energy supplies and transportation could lead to its recovery as a great power, a situation that will enable Russia to use the energy supplies as a political tool. That is why the U.S. supports the Nabucco pipeline project, the realization of which conflicts with Russia's interests.

Both Russia and the U.S. aim to achieve economic gain by determining the energy transportation routes. Thus, the Caspian basin, which is traditionally the sphere of interests of Russia, has become an important place of rivalry (the "Great Game II") between Washington and Moscow. Figure 2 gives a theoretical framework of the possible conflict over the Caspian energy supplies.

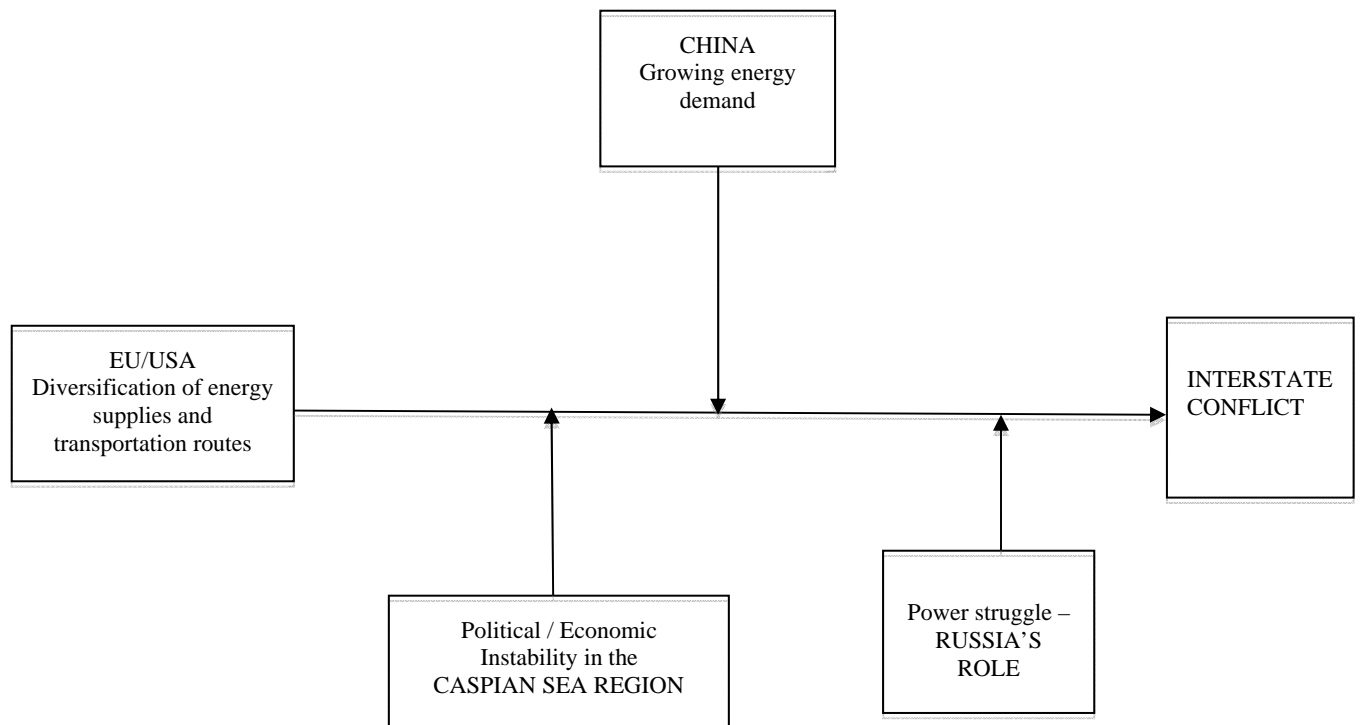


Figure 2. Theoretical Framework

B. SCOPE AND PURPOSE

The purpose of this thesis is to study the geopolitics of the Caspian Sea basin natural gas supplies and their transportation routes to markets, in order to determine whether the rivalry for energy supplies is likely to lead to interstate conflict.

The scope of this study is to evaluate the importance of the Caspian basin natural gas supplies to the world, the instability in Central Asian/Caspian basin countries, the interests and role of Russia, and the interstate rivalry over the Caspian natural gas supplies and transportation routes, by analyzing how these factors determine the realization of gas pipeline projects. Consequently, the study will provide recommendations for the European Union's energy policy.

C. RESEARCH QUESTIONS

In analyzing the likelihood of conflict among the world's powers over the energy resources of the Caspian basin, this thesis answers the following questions:

1. What is the role of the Caspian Sea basin natural gas supply in the energy supplies' diversification of Europe?
2. How is Russia using its natural gas supplies and pipeline system to strengthen its influence in the world arena, and regain lost positions in former Soviet areas?
3. How are interstate conflicts of interest likely to determine the diversification of energy supplies and the choice of natural gas transportation routes in Europe?

D. HYPOTHESIS

The realization of alternative gas pipeline projects is likely to modify the dynamics of power in the region, with Russia and the U.S. competing for control over the Caspian Sea energy resources and transportation routes.

The realization of the EU project, the pipeline Nabucco, is likely to increase the independence of Central Asian countries and to decrease the energy dependence of Europe on Russia. Even if the Nabucco project is realized, however, the EU needs Russian energy and the South Stream route.

The realization of the South Stream pipeline projects result in the strengthening of the Russian monopoly over gas flows towards the European Union, and increases Russia's global role in the international scene and the dependence of the Central Asian countries on Russia.

E. METHODOLOGY

The main tool for testing the research question is the method of process tracing in the post-Cold-War era. The detailed narrative method is used to present the current place of Caspian gas supplies among energy sources of the world. This part of the thesis presents data and statistics collected from analyses of the Center for Strategic and International Studies, Oxford Analytica, East European Gas Analysis, and U.S. Energy Information Administration Statistics and Analysis.

A comparison of energy supplies statistics (quantity of genuine gas) enables, on the one hand, the definition of the role of the Caspian gas reserves in the world, and, on the other hand, predictions of which countries are able to fill future pipelines with gas. This thesis will deduce and analyze the feasibility of the projects.

Predictive data of the growing EU, China, and U.S. energy demands in the long term will show how this basin is a target of different levels of inter-state conflicts. Various types of conflict situations between two or more nation-states (war; different levels of violence; use of diplomatic, political and economic threats; disputes) are considered to be an inter-state conflict. Even lower levels of inter-state conflicts merit attention because they can escalate into dangerous crises on the international scene. "The existence of these lower-level disputes can be taken as an indication of the potential escalation to more serious and lethal levels"¹¹

¹¹ Faten Ghosn and Glenn Palmer, "A Short Investigation of Interstate Conflict since the World War II: Has the Frequency or Severity Declined?" (Nov 17, 2003) http://www.humansecurityreport.info/background/Ghosn-Palmer_Interstate_Conflict.pdf (accessed Aug 10, 2009).

Diverse levels and risks of interstate conflicts will be supported by case studies (for example, the phases of the Russian-Ukrainian dispute over transportation since 1990; the Russian–Georgian war in August 2008). An analytic explanation is used to show how territorial and ethnic disputes in the Caspian Sea basin and transit countries are used in the interstate conflicts against opponent countries and projects.

The existing transportation routes and the three gas pipeline projects for the diversification of energy supplies of Europe are other important independent variables. The detailed narrative method is the best of the methods to present the Nabucco and the South Stream projects (independent variables).

Also, a historical explanation is used to illustrate alliances and conflicts between the different states. However, this game is not only economic: it occurs also in other fields—political and military—and becomes the center of rivalry between the U.S. and Russia on the Russian periphery and sphere of Russia’s vital interests. These are the main “actors” in this geopolitical game, with their interaction shown in Figure 3:

- a. The four world-power centers (EU, Russia, the U.S. and China), who struggle over control of the Caspian energy resources;
- b. The Caspian basin countries (Azerbaijan, Iran, Kazakhstan, Russia, Uzbekistan, and Turkmenistan) who possess and merchandize gas supplies of this area to EU; their main problem is the transportation of their gas to markets (pipeline routes).
- c. Transit countries (Turkey, Georgia, Ukraine, Azerbaijan, Kazakhstan), which play upon the competition of the four power centers.

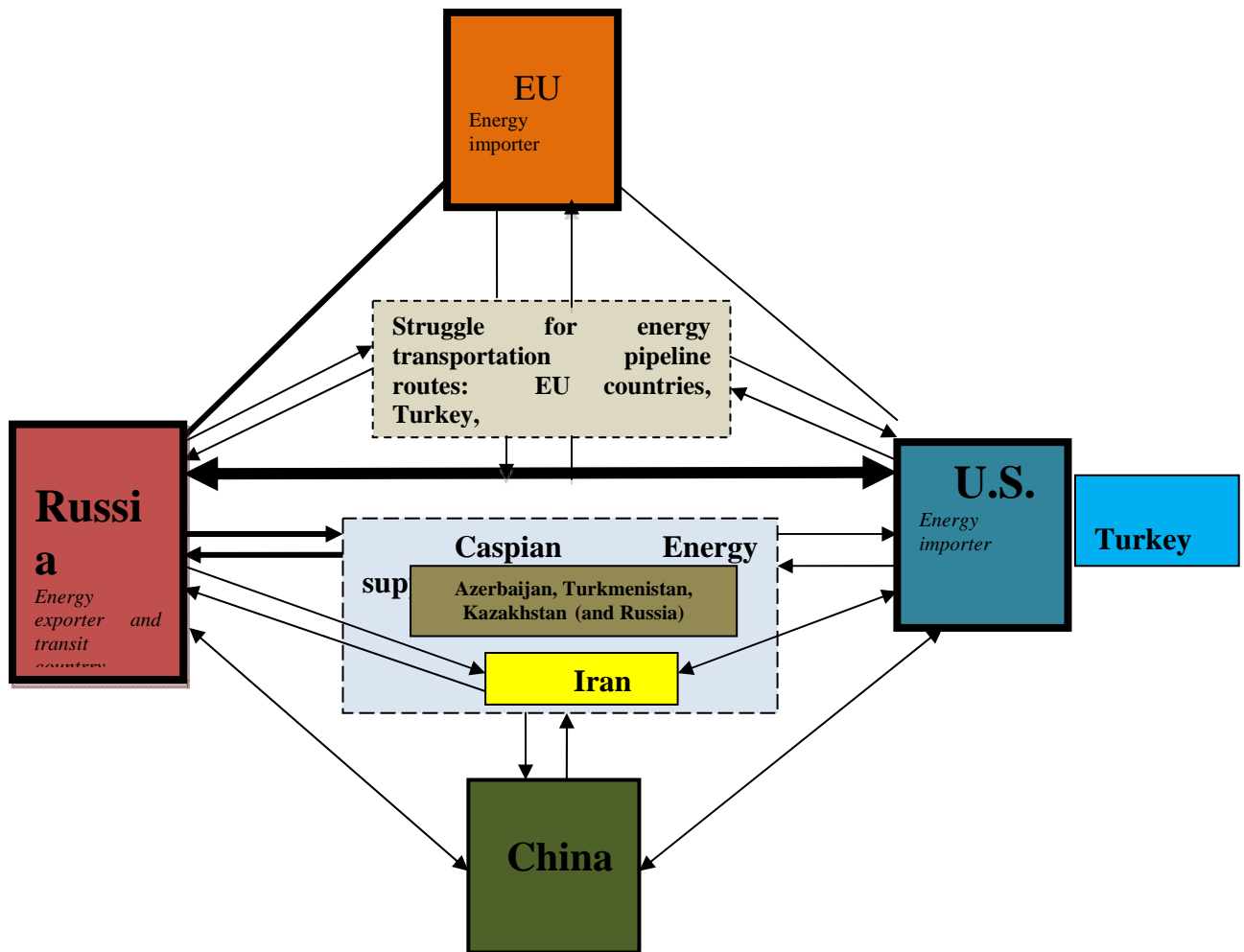


Figure 3. Players and their relations in the geopolitical game over the Eurasian energy control

F. LITERATURE REVIEW

In his analysis of the role of resources in conflicts in the post-Cold War world, Michael Klare¹² examines the potential energy conflict in the Caspian Sea basin, an area he points out as one of the most significant energy supply regions. According to Klare, energy-related conflict among the Caspian Sea countries is likely to occur because of “contested boundaries and territorial disputes, the prevalence of authoritarian regimes, long-standing regional rivalries, ethnic and religious conflicts” (p. 81). Klare further

¹² Michael T. Klare, *Resource Wars: The New Landscape of Global Conflict* (Henry Holt & Company: New York, 2001), 98.

argues that the most significant problem is the transportation of the energy through the unstable region of Central Asia and other post-Soviet countries through which the energy pipelines are expected to run.

Rivalry between Russia and the U.S. for control over the Caspian Sea Basin—a traditional sphere of influence for Moscow—is viewed as a long-term power struggle with the states in the basin seeking protection of either Russia or the United States. The U.S. is opposed to future reliance on the existing Soviet-era pipeline system. Due to this rivalry, the choice of which pipeline project to implement will reflect the interplay of regional power struggles and the influence of other world powers, such as the U.S. and China. As states within the region compete for the projects to run through their territories, external powers seek to pursue their strategic interests by determining the energy transportation routes.

Richard J. Anderson argues that although other sources of energy, such as hydroelectricity and nuclear are available, natural gas still plays a key role in the energy consumption mix. In Europe, Russia retains leverage in natural gas supplies by controlling the markets. Russia is using Gazprom as a political tool to exert its influence as well as reclaim its lost status as a world superpower. The European Union should realize the danger of over-reliance on Russia's supplies and engage in efforts to diversify its sources. As Russia continues to monopolize natural gas supply markets in Europe, EU dependence on Russia makes it vulnerable in security terms. Anderson states, "The strategy and actions of some member states to meet energy needs over the next 30–40 years undercut the EU's common energy policy. The EU must take a decisive action to diversify its future energy needs away from Russian natural gas."¹³

G. ORGANIZATION OF THE STUDY

This chapter identifies the problem; it explains that the European Union has to diversify its energy supplies and transportation routes in order to avoid a strategic

¹³ Richard J. Anderson, "Europe's dependence on Russian Natural Gas: Perspectives and Recommendations for a Long-term Strategy" (George C. Marshall European Center for Security Studies Occasional Paper series, No. 19, Sep 2008).

dependence on Russia. Among the potential energy supplies for Europe are the Caspian Sea basin natural gas resources. However, the EU's strategy to use the Caspian Sea basin natural gas conflicts with Russia's interests. In addition, the EU will find other strong competitors for the same energy supplies, including China. Chapter II describes the importance of the Caspian natural gas supplies in the world, and analyses risks of the instability in the Caspian Sea basin countries. In Chapter III, the study explains the connection between the rising energy demand and the rivalry of world powers over the Caspian natural gas supplies and transportation routes. Chapter IV explains the role and strategy of Russia as the main player in the Caspian basin scene. Chapter V summarizes the key issues discussed in the study.

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II. THE CASPIAN SEA BASIN

A. IMPORTANCE OF THE CASPIAN SEA BASIN ENERGY SUPPLIES

Natural gas constitutes a key energy source in the world's industrial sector (40 percent) and electricity generation (35 percent), percentages predicted to continue until 2030. In addition, natural gas produces less carbon dioxide than petroleum or coal, thus motivating its use by those governments trying to reduce greenhouse emissions, instead of other fossil fuels.¹⁴ This trend raises the international importance of regions that possess huge natural gas reserves, including the Caspian Sea basin. Eurasia—due to the Russian and Central Asian resources—has the second largest natural gas reserve with its 2,020 trillion cubic feet, following Middle East reserves of 2,549 trillion cubic feet¹⁵ (Figure 4). In third place is Africa (in the BP statistical review of Asia Pacific) with 490 trillion cubic feet of natural gas reserves.¹⁶

The international attention towards the Caspian Sea basin is primarily due to its hydrocarbon reserves, which most countries view as an important source for diversification of their growing energy demands. Because of the Caspian Sea geographic location, Europe is most interested in the Caspian gas resources, with its strong rivals for those reserves being the United States and China.

¹⁴ U.S. Energy Information Administration Independent Statistics and Analysis, "International Energy Outlook 2009" (May 27, 2009), http://www.eia.doe.gov/oiaf/ieo/nat_gas.html (accessed Feb 10, 2010).

¹⁵ According to International Energy Outlook, the Middle East has the largest proven natural gas reserves, and its production constitutes about 40% in the gas production between 2006 and 2030. Iran, Saudi Arabia, Qatar and the United Arab Emirates are the largest natural gas producers. After Russia, Iran has the second largest natural gas resources in the world.

¹⁶ "BP Statistical Review of World Energy" (June 2008), http://www.bp.com/liveassets/bp_internet/globalbp/globalbp_uk_english/reports_and_publications/statistical_energy_review_2008/STAGING/local_assets/2009_downloads/statistical_review_of_world_energy_full_report_2009.pdf (accessed Feb 18, 2010).

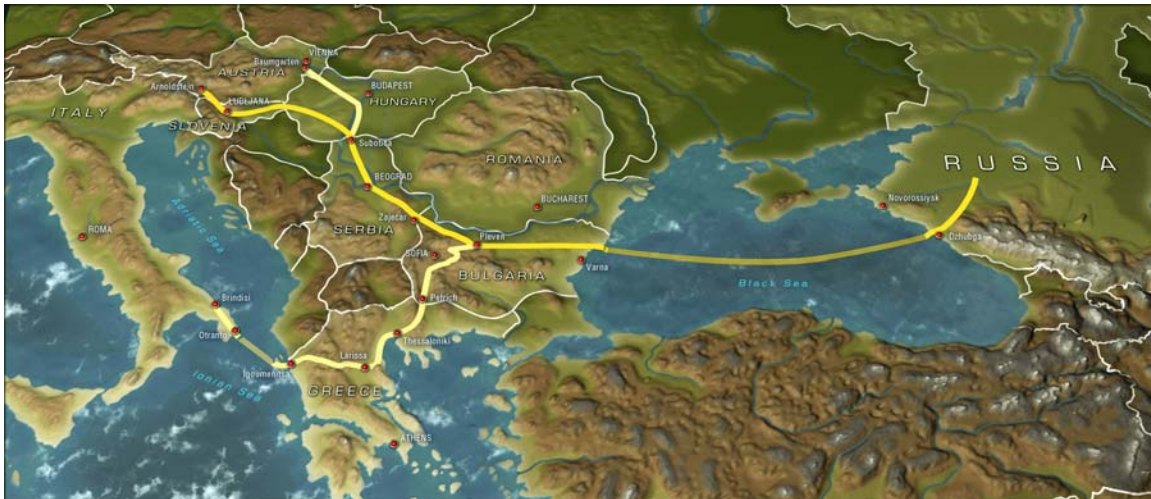


Figure 4. World natural gas reserves by geographic regions as of January 1, 2009.
From: *Oil & Gas Journal* 106, no. 48, 2008.

The Caspian Sea basin is composed of Russia, Iran, and several former Soviet republics—Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan (Figure 5).¹⁷ Five countries—Iran, Russia, Azerbaijan, Kazakhstan, and Turkmenistan—share the coast. Although this study focuses on natural gas, when we analyze the significance of the Caspian basin, it is necessary to talk about its hydrocarbon reserves. The importance of the Caspian region is determined by both oil and natural gas reserves. The Caspian Sea has six separate hydrocarbon basins, and most of its reserves are yet to be exploited.¹⁸

¹⁷ Klare, *Resource Wars: The New Landscape of Global Conflict*, 98.

¹⁸ Energy information Administration (EIA), “Caspian Sea Region,” <http://caspienergy.com/s/caspienergy1/> (accessed Jan 12, 2010).

The Caucasus and Central Asia



Figure 5. The Caspian Sea basin countries (Caucasus and Central Asia).
From: U.S. Central Intelligence Agency, <http://maps-world.net/central-asia.htm>

Over time, the estimations of the quantity of oil and natural gas reserves of the Caspian Sea have varied. The potential undersea Caspian resources are estimated to be over 200–235 billion barrels of oil reserves, in addition to 18–34 billion barrels currently confirmed (compare to the U.S. proven reserves of 22 billion barrels and the North Sea reserves of 17 billion barrels).¹⁹ The Caspian oil resources correspond to about one-fourth of the Middle East’s total proven reserves.

Natural gas reserves are even larger, comprising two-third of the hydrocarbon reserves of the region. Proven natural gas reserves are estimated at 243–248 trillion

¹⁹ Ariel Cohen, “Iran’s Claim Over Caspian Sea resources Threaten Energy Security” (The Heritage Foundation, Sep 5, 2002), <http://www.heritage.org/research/iraq/bg1582.cfm>; and Energy information Administration (EIA), “Caspian Sea Region,” <http://caspianenergy.com/s/caspianenergy1/> (accessed Jan 12, 2010).

cubic feet (Tcf).²⁰ Possible natural gas reserves (also counting Uzbekistan's gas supplies) are estimated to be as large as the already proven gas reserves, and could produce an additional 328 trillion cubic feet (Tcf). Kazakhstan, Uzbekistan and Turkmenistan are among the twenty countries possessing the world's largest natural gas reserves. Table 1 shows that, without Russia, the Caspian Sea basin countries' natural gas production constitutes less than 5 percent of the world gas reserves. Nonetheless, these reserves are large enough for countries seeking diversification of their energy supplies to avoid energy shortages.

Natural gas proved reserves at end 2008	Trillion cubic meters	Trillion cubic feet	Share of total %
Russia	43.30	1529.2	23.4
Kazakhstan	1.82	64.4	1.0
Azerbaijan	1.20	42.3	0.6
Turkmenistan	7.94	280.6	4.3
Uzbekistan	1.58	55.8	0.9
Together	55.84	1972.3	30.2
Together without Russia	12.54	443.1	6.8

Table 1. Estimated hydrocarbon reserves of the most important hydrocarbon producers of the post-Soviet region. From: BP Statistical Review of World Energy, June 2008

The natural gas reserves of the Caspian region were extracted also during the Soviet era. In 1990, the production of the Caspian Sea basin, including Uzbekistan, was 5.4 Tcf. The dissolution of the Soviet Union in 1991 led to a fall in gas production in the region.

After becoming independent, Turkmenistan, Kazakhstan, Uzbekistan and Azerbaijan realized the importance of their hydrocarbon wealth and started to develop

²⁰ Cohen, "Iran's Claim Over Caspian Sea Resources Threaten Energy Security."

their national hydrocarbon industries, with the help of foreign investments in the gas and oil sector. With the fall of the Soviet Union in 1991, these countries faced competition from the Russian state natural gas company, Gazprom. Since Gazprom owned all pipelines routes in Russia, the Caspian Sea countries had to depend on Russia for the export of their natural gas, without which their production would remain out of market.²¹ Faced with the lack of an infrastructure under their control, the Caspian Sea countries had three options:

- Sell their gas to other post-Soviet poor neighbors with weak economies who cannot pay with cash, or pay with delays;
- Sell their gas to Russia under market prices;
- Pay transit fees to Gazprom.

None of these three options was perfect: thus, the economy of the gas-producing Caspian countries declined. The GDP of Turkmenistan, for example, fell by 25.9 percent when Russia denied Turkmen gas access to its gas pipelines. Territorial disputes over gas fields among the Caspian Sea countries have also contributed to the decline of the economies of these countries.

Turkmenistan and Azerbaijan remain locked in a dispute over the Serdar/Kyapaz field, while Azerbaijan has objected to Iran's decision to award Royal Dutch/Shell and Lasmo a license to conduct seismic surveys in a region that Azerbaijan considers to fall in its territory. In addition, Turkmenistan claims that portion of the Azeri and Chirag fields, which Ashgabat calls Khazar, and Osman, respectively lie within its territorial waters rather than Azerbaijan's. Turkmenistan has insisted that work at the Azeri and Chirag fields, which is being carried out by the Azerbaijan's International Operating Company (AIOC), be stopped.²²

Territorial disputes over the fields, such as the unsettled legal status of the Caspian Sea, discourage foreign companies from investing in the extraction of the Caspian reserves. The effect on the Caspian Sea countries is a slowed exploitation of their gas wealth.

²¹ Cohen, "Iran's Claim Over Caspian Sea Resources Threaten Energy Security."

²² R. Orujov, "Security on the Caspian Sea" (*The Azeri Times*, Feb 12, 2010), <http://www.theazeritimes.com/site/economy/3445> (accessed Feb 19, 2010).

B. UNSETTLED LEGAL STATUS OF THE CASPIAN SEA

The Caspian Sea is the world's largest landlocked body of salt water, and called the largest lake or full-fledged sea in the world. The uncertainty connected with its name—lake or sea—is related to disputes among the littoral states regarding the legal status of the Caspian. This is due to the fact that an agreement regarding its legal status will also have consequences on the division of the undersea hydrocarbon resources among five littoral states.

Before the collapse of the Soviet Union in 1991, only two countries—the USSR and Iran—surrounded the Caspian Sea, and the legal status of the sea was determined by two bilateral agreements between the two states. In 1921, Iran and the Soviet Union signed a treaty (which was reaffirmed in 1940), which gave “an exclusive ten-mile-wide coastal fishing zone” to each state. After the dissolution of the Soviet Union, Azerbaijan, Turkmenistan, and Kazakhstan emerged as new independent nation-states demanding their share of the maritime and seabed boundaries, including the natural minerals of the Caspian Sea. Despite the continuous negotiations among the five littoral states, no consensus has been achieved regarding the legal status and ownership of the Caspian Sea's resources.

Russia, supported by Iran, holds that treaties signed in 1921 and 1940, which provided a ten-mile coastal zone to littoral states and left the rest of the water mass under shared jurisdiction, are still effective. Kazakhstan, Azerbaijan and Turkmenistan, however, object to Russia's position, demanding the division of the entire Caspian Sea among the five littoral states. Russia and Iran argue in favor of their position that the Caspian is a lake, and, therefore, not subject to the provisions of the United Nations Convention on the Law of the Sea (UNCLOS). The legal position adopted by Russia and Iran is contested by the other three littoral states, with argue that the Caspian is a sea, and, therefore, subject to UNCLOS—a position supported by the United States. Disregarding the Russian and Iranian challenge, Turkmenistan and Azerbaijan have proceeded to unilaterally exploit the Caspian undersea resources by, for example, leasing sections of the maritime territory to international energy consortia. Efforts by Azerbaijan and

Turkmenistan to develop the Caspian resources have, however, created tension between them due to disagreements on the sector boundary.²³

The unsettled legal status of the Caspian Sea discourages foreign investments, which would enable the extraction of the hydrocarbon resources and the development of the Caspian basin. The contested legal status of the sea also delays the realization of the pipeline projects from Central Asia to the world markets. Not only does the unsettled legal status jeopardize international investments, but also the political instability of these countries

C. INSTABILITY OF THE REGION

Among the consequences of the collapse of the Soviet communist empire were the rise of nationalistic consciousness after seventy years of repression, and the formation of nation states from former Soviet republics. The development of the Caspian Sea region is complicated by the recent appearance of world power rivalries over the energy resources, in addition to the grave political, ethnic, and religious tensions in the region, the main part of all three of which is the heredity of the Soviet regime. In order to understand the development of the post-Soviet republics in Central Asia and in the Caucasus, it is inevitable to refer to the history of these regions: their conquest by Tsarist Russia, unification into Soviet republics under the Soviet Union (1922–1990), and their rise into nation-states in the post-Cold War era (since 1990).

The discovery of vast oil deposits and natural gas supplies gave the region a new geopolitical character, “The new oil and gas El Dorado,”²⁴ and influenced the rise of the nation-states of post-Soviet Central Asian and Caucasian republics of Kazakhstan, Tajikistan, Uzbekistan, Kyrgyzstan, Turkmenistan, Georgia, Armenia, and Azerbaijan (Figure 5).

²³ Orujov, “Security on the Caspian Sea.”

²⁴ Klare, *Resource Wars: The New Landscape of Global Conflict*, 84.

1. Historical Background and the Failed Attempt to Create a Turkic Nation-State

The strategic role of Central Asia in the past was determined by its geopolitical position: From ancient times until the end of middle ages, the main commercial and cultural corridor between West and East passed through this region. Ferdinand von Richthofen, a German geographer of the 19th century, referred to this corridor as the “Silk Road.”²⁵ On this trade-road network, merchants, missionaries, and conquistadors carried silk, gems, pottery, tea, paper, medicines, mirrors, foodstuff, plants and other items, promoted economic and cultural trade between the Mediterranean and Persia, India, and China. By the end of the medieval ages, however, the importance of the Silk Routes declined as the world trade routes transferred to the seas.

After the disappearance of the Silk Routes in the medieval ages, Central Asia and the Caucasus regions were again “discovered” in the 19th century. At this time, the Russian Empire and the British Empire got involved in a strategic clash called “The Great Game”²⁶ for the supremacy of Central Asia. The British thought that the Russian Empire was gaining too much power by its expansion, and threatened the borders of British India. The British and Russian rivalry over Central Asia and the Caucasus lasted from the Russo-Persian Treaty of 1813 to the Anglo-Russian Convention of 1907.

During the “Great Game,” Turkestan (a territory of Turkic inhabitants such as Uzbeks, Kazakhs, Khazars, Kyrgyzs, and Uyghurs), comprising the present-day Central Asia came under Russia in the 1860s, and Russia also annexed the Trans-Caspian region in 1881–1885. Today, the two Turkic nation-states are Turkey and Azerbaijan. Turkestan played an essential economic role as the Russians distanced themselves from the local population with some local autonomy vested in the authorities of Turkestan. The Muslim religious courts are some of the significant elements of this autonomy, which remain unchanged.

²⁵ Lilla Makkay, “Élénkülő forgalom a selyemúton, avagy a “Nagy Játszma” újabb fejezete Közép-Ázsiában” (Renewed Trade on the Silk Road, or The Newest Chapter of the “Great game” in Central Asia) 2009, www.kulugyiintezet.hu/kszipdf/2009.../144-165_KSz2009_01.pdf (accessed Sep 17, 2009).

²⁶ Peter Hopkirk, *The Great Game: The Struggle for Empire in Central Asia* (Kodansha International, 1992), 565.

An attempt to create a Turkic nation-state was made during the First World War when the Muslim Council of Turkestan declared autonomy; however, the Soviet forces quickly defeated the new government. At the end of the war, Soviet forces conquered Central Asia and created the Turkestan Autonomous Soviet Socialist Republic, which although administratively modeled in Soviet design, respected local religion and customs.²⁷ Following the Bolshevik revolution in 1917, the nations of Central Asia were reorganized into Soviet Republics with some autonomy. Such republics included the Kazakh Autonomous Soviet Socialist Republic created in 1920, the Uzbek Soviet Socialist Republic and the Turkmen Soviet Socialist Republic created in 1924, and from the Kyrgyz Autonomous Oblast, a Soviet Socialist republic created in 1936. The Tajik Soviet Socialist Republic emerged from the Turkmen Soviet Socialist Republic through secession in 1929. These autonomous Soviet Socialist Republics were later to become nation-states following the dissolution of the Soviet Union.

What characterized this reorganization of Central Asian nations into Soviet Republics was the attempt by the Soviets to divide Turkestan, following the rise of two political and ideological movements: Pan-Turkism and Pan-Islamism. The objective of Pan-Turkism in the 19th century was the ethnic, political and cultural unity of the Turkic people—an idea later renewed after the collapse of the Soviet Union.²⁸ At the same time, Pan-Islamism was a political movement whose purpose was to unite Muslims into one state (Caliphate).²⁹ Faced with these movements, the Soviet government considered them a threat and thus fragmented Central Asia into ethnic republics. However, in fact, the territories of these republics had little to do with ethnic arrangements, which were a source of several ethnic conflicts in the post-Cold War era. To prevent Central Asian ethnic links with Iran and Turkey, Russia closed the southern frontiers and introduced the Cyrillic writing and Russian language within these republics, and persecuted Islam and other religions.

²⁷ Hopkirk, *The Great Game: The Struggle for Empire in Central Asia*, 567.

²⁸ Pan-Turkism (Britannica online encyclopedia), <http://www.britannica.com/EBchecked/topic/440700/Pan-Turkism>.

²⁹ Magda Katona, “A terrorizmus jelenségének főbb okai és megszüntetésének lehetőségei” (Main Reasons of Terrorism and Possibilities of its Cessation). (Eszmélet Folyóirat), www.freeweb.hu/eszmelet/53/katona53.htm (accessed Sep 19, 2009).

The importance of the Central Asian region during World War II was derived from the fact that it was far from the frontlines and offered sanctuary for Soviet industry, as well as a settlement for millions of refugees in Central Asia. It was after World War II that the “Virgin Lands Campaign” was launched in Central Asia by the Soviet government as part of a wider agricultural resettlement program in the 1950s. The campaign moved masses of people from the European part of the USSR, especially from Ukraine to Kazakhstan, thus modifying the ethnic structure of the region.

2. The Emergence and Crises of Nation-States in Central Asia and the Caucasus after the Dissolution of the Soviet Union

The dissolution of the Soviet Union came as a decision in the Soviet political leadership, rather than as a result of a massive insurgency. Independence was, in fact, forced on the Central Asian elites by the decision of Russia, Ukraine and Belarus to dissolve the USSR. Thus, the formation of nation-states from the Soviet Republics was a generally peaceful process, without wars, with the only exception being the Tajik Civil War from 1992 to 1997. The power remained in the hands of the same Soviet-era elites who simply repainted themselves into Islamic colors, the only partial exception being Kyrgyzstan, where a non-communist, Askar Akaev, had been elected president.

The development of these nation-states is directly related to the economic support of Russia on the one hand, and their energy supplies, oil and gas transportation routes to the markets on the other one. In the post-Cold War era, the interest of the international community (such as the European Union, the United States, and China) toward Central Asian and Caucasian authoritarian regimes and undeveloped democracies is based on their energy resources and strategic geographical position in the War on Terrorism. At the same time, Russia tries to reinforce her influence in these regions as it maintains that

they are its near periphery and terrain of direct vital interests. As a consequence of the dissolution of the Soviet Union, Russian minorities live in Central Asia, and continue to count on Russia for protection.³⁰

At the same time, these states have many problems, inherited mainly from the Soviet organizational design, which interlaced each dimension of life. One of the main problems of these regimes is the “deficiency of democracy.” However, although these republics have democratic structures and elections, some of them, like Azerbaijan, Uzbekistan or Turkmenistan, are autocratic regimes in which the local elite of former Soviet times maintain political and economic power, and have close contact with the Russian elite. The ruling elites of these countries are corrupt and, like Russian oligarchies, use energy resources for their personal enrichment. For example, before the elections of 2005, the Azerbaijan president, Ilham Aliyev, kept his liberal opposition away from the country with the help of Russian secret services. Azerbaijan is the only state of the post-Soviet territory in which, despite having a democratic system, a dynasty has emerged: Heydar Aliyev was succeeded as president in 2003 by his son, Ilham Aliyev.³¹ Russia maintains her influence in these countries because of the close contacts with the local elite, her deep knowledge of local conditions, and her strong positions affecting energy supply. Russia also uses the numerous territorial disputes and ethnic conflicts in favor of her interests.

The Caucasus and Central Asia form a mosaic of multi-ethnic and multi-religious societies. “Frozen” ethnic conflicts are the source of serious domestic problems and interstate conflicts, which even led to interstate wars. The territorial dispute between Armenia and Azerbaijan over the enclave of Nagorno–Karabakh between 1988 and 1994 turned into war, creating about eight hundred thousand Azeri refugees. To date, this conflict has not been resolved, and the Armenian military continues to occupy the

³⁰ Kazakhstan has 30%, Kyrgyzstan 12.5%, Uzbekistan 5.5%, Turkmenistan 4% of Russian population. Meanwhile the percentage of Russian population in Azerbaijan, Armenia, Georgia, and Tajikistan is negligible — between 0.4 and 1.8%. (Central Intelligence Agency, *The World Factbook*) <http://www.cia.gov/library/publications/the-world-factbook> (accessed Apr 10, 2010).

³¹ Stephen Mulvey, “Profile: Ilham Aliyev,” Oct 16, 2003, <http://www.news.bbc.co.uk/2/hi/europe/3194422.stm> (accessed Apr 10, 2010).

disputed enclave. Due to its rising hydrocarbon wealth, Azerbaijan has become one of the most important countries of the region, with a strong military and the threat of war with Armenia if the latter does not withdraw from Nagorno–Karabakh. Azerbaijan’s threat of war is a result of a lack of positive outcomes from the diplomatic efforts its leaders have engaged in for the past fifteen years.³²

Permanent conflicts between Georgia and Abkhazia, and Georgia and South Ossetia, since the beginning of 1990s (the South Ossetia War in 1991–1992, and the War in Abkhazia in 1992–1993) escalated into the unprecedented war between Russia and Georgia in August 2008, leading to the secession of Abkhazia and South Ossetia from Georgia. Tbilisi has lost control over these territories. Russia unilaterally recognized the independence of Abkhazia and South Ossetia, and Russian troops remain in the two independent territories, even with the international community’s condemnation of Russian recognition.

Territorial disputes, as well as hot or frozen ethnic conflicts, also destabilize the transportation of energy to markets. Klare (2001) argues that the most significant problem of the Caspian Sea basin reserves is that their transportation should go through unstable post-Soviet states. In the expectation that energy reserves will bring an economic enhancement for the Caspian Sea basin countries in the long term, the concern is that, in the short term, the power rivalry over the natural gas supplies and pipelines will lead to more instability in the region.

³² Kósa András, “Ujrajátszás? – Megint háború jöhet a Kaukázusban” (Replay? – War could come again to the Caucasus), Feb 26, 2010, http://www.hirszerzo.hu/cikk.ujrajatszaz_megint_haboru_johet_a_kaukazusban.141687.html (accessed Feb 27, 2010).

III. POWER RIVALRY OVER THE CASPIAN

A. POWER RIVALRY OVER THE CASPIAN NATURAL GAS

According to the International Energy Agency, fossil fuels remain dominant in the primary energy mix, constituting over three-quarters of the total increase in energy use between 2007 and 2030 (Figure 6). Through 2030, the primary energy demand is expected to grow by 1.5 percent per year, with an overall increase of 40 percent.³³ Consequently, natural gas consumption will grow “from 104 trillion cubic feet in 2006 to 153 trillion cubic feet in 2030.”³⁴

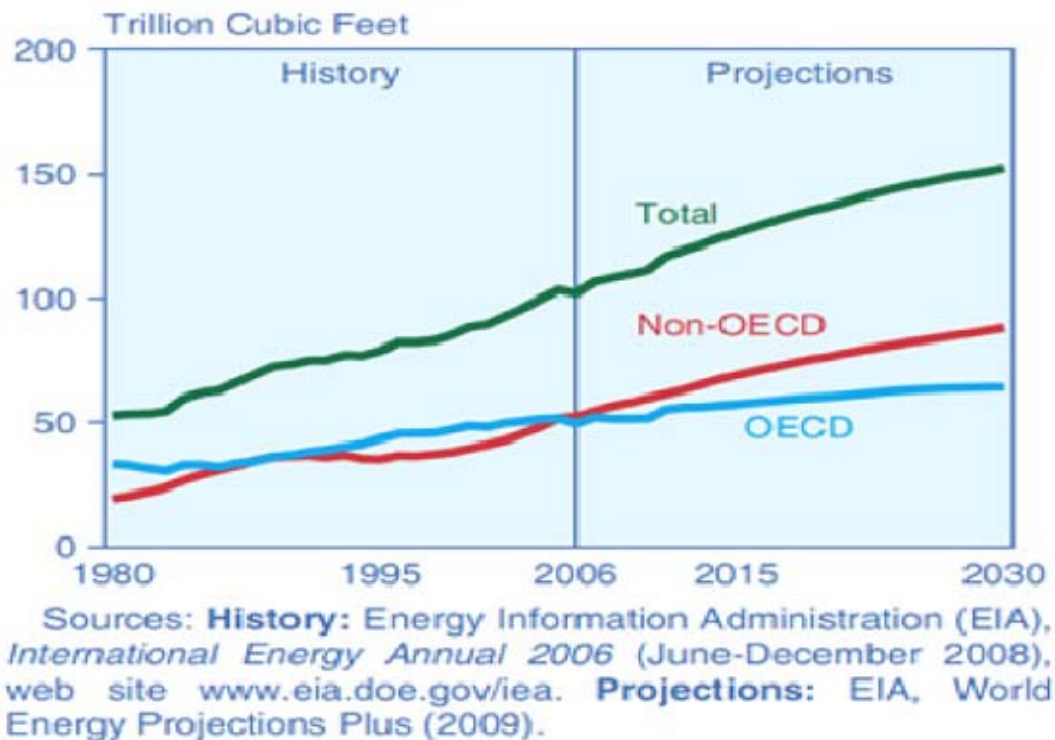


Figure 6. World Natural Gas Consumption 1980–2030. From: Energy Information Administration, <http://www/eia.com>

³³ International Energy Agency, “World Energy Outlook 2009,” 4, http://wordenergyoutlook.org/docs/weo2009/WEO2009_es_english.pdf (accessed Mar 6, 2010).

³⁴ Energy Information Administration, “International Energy Outlook 2009,” http://www.eia.doe.gov/ieo/nat_gas.html (accessed Jan 6, 2010).

As a result of the 2009 economic crisis, there has been a reduction in energy investments, with current policies putting the world on an “an alarming fossil energy-path.”³⁵ In the absence of energy policy change, dependence on fossil fuels will increase, contributing to negative consequences in climate change and energy security. The demand for fossil fuels is projected to rebound between 2010 and 2015, and slow down after 2015 as “emerging economies mature and global population growth slows.”³⁶ The OECD countries are expected to spend about 25 percent of their GDP on gas and oil imports by 2030. The non-OECD countries are projected to spend an even greater amount.³⁷ With the trend in world energy demands, China’s energy imports will exceed the U.S. imports by 2025, making China the world’s third largest importer of energy.

Energy power generation of an annual growth rate of 2.5 percent per year through 2030 means an increase in the demand for coal and gas.³⁸ More than 80 percent of this growth will occur in non-OECD countries, with the biggest growth in the Middle East, and developing Asian countries.³⁹ However, the current debate on climate change could modify the current energy trend, as new energy policies emerge. But even as governments worldwide manage to limit the long-term concentration of greenhouse gases to 450 parts per million of CO₂-equivalent (ppm CO₂-eq) in the atmosphere, natural gas will remain a major energy source due to its low carbon content compared to oil or coal.

Another modification to the world’s natural gas demand is the U.S. and Canada’s unconventional gas production since 2006, which has made these countries non-reliant on liquefied natural gas imports. The proportion of unconventional gas production in 2008, for example, was 50 percent, and is expected to rise to 60 percent by 2030 in the U.S.

³⁵ International Energy Agency, “World Energy Outlook 2009,” 5–6.

³⁵ Ibid., 4.

³⁷ Ibid., 6.

³⁸ Ibid., 4.

³⁹ Ibid., 4, 10.

Thus, the North American demand of natural gas could be less than the expected, a fact that will significantly lower North American's portion of the use of gas transportation.⁴⁰

The huge unconventional gas reserves of Europe, India, China, and Australia remain untapped owing to the lack of financial capital and technical expertise to exploit them, as well as the distance of the reserves from existing pipelines. Compared to the projected U.S. unconventional gas use of 60 percent by 2030, Europe and Asia Pacific are expected to use only 15 percent unconventional gas,⁴¹ with natural gas continuing to provide most of their energy.

According to energy experts, between 2007 and 2030, the countries of the Association of Southeast Asia Nations (ASEAN)⁴² will record an energy demand increase of about 76 percent due to their rapid economic and population growth, urbanization, and industrialization. The ASEAN energy demand growth rate of 2.5 percent is faster than that of rest world. "Coupled with the emergence of China and India on the global energy scene, these trends point to refocusing of global energy activity towards Asia."⁴³ Since Southeast Asia's proven oil reserves form only 1 percent of its demand, and despite its dependence on coal for power generation, it is likely to experience a natural gas shortage in the future, thus prompting an increase in its energy imports. This means that the main competitor of Europe over the Caspian Sea basin and Russia's energy supplies will likely be Asia, especially China, India and ASEAN countries.

The fact that natural gas supplies are concentrated in a few countries, mainly Russia and in the Middle East increases the energy security concern of importing countries. The energy security issues, therefore, raise the value of the Caspian Sea/Central Asian energy supplies as alternative to the Russian and Middle East reserves.

⁴⁰ International Energy Agency, "World Energy Outlook 2009," 10, 12.

⁴¹ Ibid., 12.

⁴² Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippine, Singapore, Thailand and Vietnam. <http://www.aseansec.org> (accessed Mar 5, 2010).

⁴³ International Energy Agency, "World Energy Outlook 2009," 13.

Consequently, the Caspian basin has become a site of rivalry for control of its gas supplies by world powers centers—Russia, the U.S., China and the European Union.

1. Russia

Russia views Central Asia and the Caucasus as its periphery (“near abroad”) and territory of strategic and vital interests. The Russian interests will be analyzed in Chapter IV.

2. The United States

The “West” and in particular the United States are interested in ensuring that Russia does not rise as a hegemon in Eurasia. To this end, the U.S. tries to “pick away” former Soviet Republics from Russia’s sphere of interest including the Baltic Republics, Ukraine, Georgia, and the Central-Asian post-Soviet countries, by encouraging pro-Western and pro-American democratic movements, or so called “color revolutions” (Georgia, Ukraine, Kyrgyzstan).⁴⁴ The Ukrainian orange revolution was a breaking point in Russia–United States relations.

The U.S. economic goal in the Caspian region is two-pronged: to develop the Caspian natural gas supplies as an alternative to the Persian Gulf resources, and to guarantee the transport of these natural gas supplies to their markets without going through the Russian or the Iranian territory. Starting in the 1990s, U.S. interests in the Caspian Sea natural gas supplies have developed contacts with the Caucasian and Central Asian Republics, as well as attempted to determine gas transportation routes towards Europe.

As the U.S. energy consumption leans towards domestic non-conventional gas, its interest in the Caspian Sea and Central Asia may be described as more political than economic. The value of the Caspian Sea basin and Central Asia for the United States is mainly in their geostrategic position: close to Iran, Afghanistan, Pakistan, and also located in the Russian sphere of interest. In part, the U.S. recognizes that Russia’s

⁴⁴ Sz. Bíró Zoltán. “A FÁK-térség: az integráció politikai esélyei” (The CIS-area: Political Chances of the Integration), 2008, www.fakprojekt.hu/index.php? (accessed Sep 23, 2009).

monopoly of energy supplies and transportation could lead to its recovery as a great power, a situation that will enable it to use the energy supplies as a political tool. That is why the U.S. supports the Nabucco pipeline project, the realization of which conflicts with Russia's interests. Moreover, U.S. influence on the Caspian Sea basin and Central Asia countries is aimed at weakening Russia's position.

3. China

China's rapidly increasing energy demand has seen a rise in its interest in the Caspian Sea supplies, and its emergence as a competitor for economic influence in the region, against both Russia and the U.S. In 2009, China signed a contract of approximately \$4 milliard credit with Turkmenistan to develop natural gas fields. According to the contract, Turkmenistan will deliver another ten billion cubic meters (bcm) of natural gas to China National Petroleum Corporation during a 30-year period, in addition to an annual 30 bcm agreed upon before.⁴⁵ This agreement is inconvenient to both Russia and the European Union, both of whom hoped to fill the future Nabucco natural gas pipeline mainly with Turkmen gas.

4. European Union

Europe's dependence on Russia's natural gas for electricity and heating makes Europe vulnerable to Russian influence. Historically, energy has played a decisive role in Europe. The predecessor of the European Union, the European Coal and Steel Community, emerged as an energy community in 1951 with six founder countries—Belgium, Germany, Luxemburg, Italy, France and the Netherlands.⁴⁶ Over time, however, due to environmental concerns, the importance of coal has increasingly diminished, and nuclear energy, gas and oil are replacing it. The EU directive to reduce levels of CO₂ emissions, supported by European policy makers, has increased the importance of natural gas.

⁴⁵ Vladimir Socor, "China to increase Gas imports From 'Economically Complementary' Turkmenistan" (The Jamestown Foundation: June 30, 2009) <http://www.jamestown.org/> (accessed Aug 15, 2009).

⁴⁶ "The history of the European Union," http://europa.eu/abc/history/index_en.htm (accessed Mar 13, 2010).

However, growing preference to use natural gas over alternatives has created an increased dependence on natural gas reserves. With the primacy of natural gas, the attention of the EU initially turned towards the Soviet Union for supply; however, after the Soviet Union's dissolution, the EU's attention shifted to the post-Soviet region, especially Russia. As a result, since the 1990s, Russia has become the main energy supplier to the EU. The EU–Russian energy dialog launched in 2000 indicates the increasing role of Russia in European energy supply.⁴⁷

The energy supply continues to be one of the leading challenges in the European community. Insufficiency and declining European natural gas supplies on the one hand, and the increasing energy demand on the other hand, have forced Europe to rethink its energy policy. The declining natural gas production is notable in the United Kingdom, Denmark and Holland, while Norway has to invest in development of new natural gas fields in the expensive arctic region in order to maintain its present natural gas production.⁴⁸ Estimates have it that in the next twenty-five years, “80 percent of the European Union's natural gas will be imported, with Russia providing up to 60 percent.”⁴⁹

Table 2 illustrates the energy dependence of the EU by country. As illustrated, some of the largest European countries are less dependent on Russian natural gas, because they have access to LNG terminals and gas pipelines, connected to other, non-Russian gas producers such as Poland, the United Kingdom, Romania, the Czech Republic, Sweden, Estonia, Netherlands, Bulgaria, and France. Nevertheless, the countries of Eastern and Central Europe (ECE) have less choice and are dependent on Russian gas imports for seventy to 90 percent of their energy needs.⁵⁰

⁴⁷ Ludvig Zsuzsa, “Az Európai Unió és a FÁK-országok közötti ‘energiadialógusok’ - Fókuszban a szénhidrogén szállítások (‘Energy dialogues’ between the European Union and CIS countries – in focus hydrocarbon’s transportation),” 99, http://www.vki3.vki.hu/kke_4_ludvig.pdf (accessed Jan 25, 2010).

⁴⁸ Keith C. Smith, “Russia-Europe Energy Relations: Implications for U.S. Policy” (CSIS: Feb 2010), 5 <http://www.csis.org> (accessed Mar 10, 2010).

⁴⁹ Anderson, “Europe’s dependence on Russian Natural Gas: Perspectives and Recommendations for a Long-term Strategy,” 10.

⁵⁰ Smith, “Russia-Europe Energy Relations: Implications for U.S. Policy.”

ENERGY DEPENDENCY

Energy consumption by EU-member states, their net imports and dependence rate in 2008.

The most important suppliers of crude oil and natural gas were Russia (33% of oil imports and 40% of gas imports) and Norway (16% and 23% respectively).

EU Member State	Gross Energy consumption ¹⁾	Net imports ²⁾	Energy Dependency ³⁾
1 Cyprus	2.6	3	100%
2 Malta	0.9	0.9	100%
3 Luxembourg	4.7	4.7	98.9%
4 Ireland	15.5	14.2	90.9%
5 Italy	186.1	164.6	86.8%
6 Portugal	25.3	21.6	83.1%
7 Spain	143.9	123.8	81.4%
8 Belgium	60.4	53.5	77.9%
9 Austria	34.1	24.9	72.9%
10 Greece	31.5	24.9	71.9%
11 Latvia	4.6	3.2	65.7%
12 Lithuania	8.4	5.5	64%
13 Slovakia	18.8	12	64%
14 Hungary	27.8	17.3	62.5%
15 Germany	349	215.5	61.3%
16 Finland	37.8	20.9	54.6%
17 EU27	1825.2	1010.1	53.8%
18 Slovenia	7.3	3.8	52.1%
19 France	273.1	141.7	51.4%
20 Bulgaria	20.5	9.5	46.2%
21 Netherlands	80.5	37.2	38%
22 Sweden	50.8	19.8	37.4%
23 Estonia	5.4	1.9	33.5%
24 Romania	40.9	11.9	29.1%
25 Czech Republic	46.2	12.9	28%
26 United Kingdom	229.5	49.3	21.3%
27 Poland	98.3	19.6	19.9%
28 Denmark	20.9	-8.1	-36.8 ⁴⁾

1) Gross energy consumption in Million tonnes oil equivalent (Mtoe). Defined as primary production plus imports, less exports.

2) Net imports means imports minus exports.

3) Imports divided by gross consumption.

4) Denmark is a net exporter of energy.

Table 2. Energy consumption, imports and energy dependency of the European Union countries. From: <http://www.energy.eu/#dependency>

However, the Russian–Ukrainian gas disputes in 2006 and 2009, which led to the disruption of natural gas supplies to Ukraine, had a great impact on Europe and resulted in grave gas shortages throughout the continent. Since the beginning of 2000, the EU has been thinking about a common energy policy with the purpose of reducing its dependence on Russia’s natural gas, and has been seeking alternative, non-Russian energy supplies. Otherwise, Russia might, in the future, use its energy “weapon” to dictate conditions.

According to Smith, “in spite of their greater dependency on and vulnerability to Russian supplies, the ECE governments receive less EU funding for energy projects such as interconnectors than do the wealthier member states to their west.”⁵¹ So far, the solidarity of the EU on energy remains weak in spite of support of its common energy policy by ECE countries.

⁵¹ Smith, “Russia-Europe Energy Relations: Implications for U.S. Policy,” 6.

Hungary, which assumes the presidency of European Union over the first half of 2011, intends to prioritize the energy security in the EU agenda during its presidency. After the presidency of the Czech Republic in the first half of 2009, none of the succeeding EU presidency countries dealt with the energy security as a top priority. After the Russian–Ukrainian agreement in the 2009 gas crisis, the importance of long-term projects in energy security seemed to decrease within the EU.

Hungary, as a current chairman of the Visegrad Four Group,⁵² initiated and held a region-wide Energy Security Summit in February 24, 2010, in Budapest, where the prime ministers of eleven countries—Hungary, Poland, the Czech Republic, Slovakia, Austria, Romania, Bulgaria, Slovenia, Serbia, Croatia, and Bosnia-Herzegovina—participated. Representatives of the EU and the U.S. also took part in the meeting.⁵³ In the communiqué of the summit, the participating countries proclaimed their willingness to harmonize energy projects, advance common energy policies in the EU, form a unified natural gas market, support the EU-planned Southern Energy Corridor, and develop LNG import terminals. The implementation of the initiatives is expected to promote the attainment of the New Europe Transmission Systems (NETS) concept, launched by the Hungarian energy company MOL in 2007.

Moreover, the summit called for an effective solidarity mechanism and more investments in storage and connectivity projects, and also emphasized the need for North-South pipeline connections, which are presently inadequate. To unify their gas delivery, the countries intend to shift the delivery points to the external borders of the EU. Socor, a political commentator, affirms that in spite of the summit participants' intentions, "the fact felt diplomatically unsaid is that Gazprom-led projects, such as Nord Stream and South Stream, would perpetuate EU market fragmentation on a number of counts, including delivery points inside the EU's borders."⁵⁴

⁵² The Visegrad Group was established on Feb 15, 1991 to intensify collaboration among the Central European countries. ("About the Visegrad Group") <http://visegradgroup.eu/main.php?folderID=938> (accessed Apr 17, 2010).

⁵³ Socor, "11 countries in Central, Southern Europe hold energy summit," (Moldova.org, Mar 3, 2010) <http://economie.moldova.org/news/> (accessed Apr 17, 2010).

⁵⁴ Ibid., 2.

One option for the European Union to reduce strategic energy dependency on Russia can be the exploitation of Caspian Sea basin natural gas reserves and the construction of new pipelines to bypass Russia's territory. However, Europe faces strong competition from China, India, and the ASEAN countries for the same supplies. This rivalry has transformed Central Asia and the Caucasus to a terrain of energy resource struggles. Moreover, there is the rivalry over the pipelines routes to transport the Caspian Sea natural gas to markets.

B. POWER RIVALRY OVER THE NATURAL GAS TRANSPORTATION ROUTES

Presently, natural gas from Russia to Europe is distributed through the existing ex-Soviet pipelines system. Even with the discovery of Caspian energy supplies, Russia is determined to ensure utilization of its widespread natural gas network in the transportation of the Caspian supplies to markets for two reasons: to control the Caspian energy, and to gain transit fees. But for the purpose of ensuring a reliable supply and transportation of natural gas, Russia and the European Union plan new pipeline projects, namely Nord Stream, South Stream, and Nabucco.

To diversify its energy supplies, the European Union has sought the construction of new pipelines from Central Asia to Europe. In 1993, the EU launched the Europe-Caucasus-Asia (TRACECA) transport system program, identified informally as the Great Silk Road (present day Nabucco, Figure 7).

A related EU conference "brought together trade and transport ministers from the Central Asian and Caucasian republics to initiate a transport corridor on a West-East axis from Europe, across the Black sea, through the Caucasus and the Caspian Sea to Central Asia."⁵⁵ In 1998, twelve countries—Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyz

⁵⁵ Energy information Administration, "Caspian Sea Region," <http://caspienergy.com/s/caspienergy1/> (accessed Feb 7, 2010).

Republic, Moldova, Mongolia, Poland, Romania, Tajikistan, Turkey, Ukraine and Uzbekistan—signed the Baku Declaration about the restoration of the historic Silk Route.⁵⁶

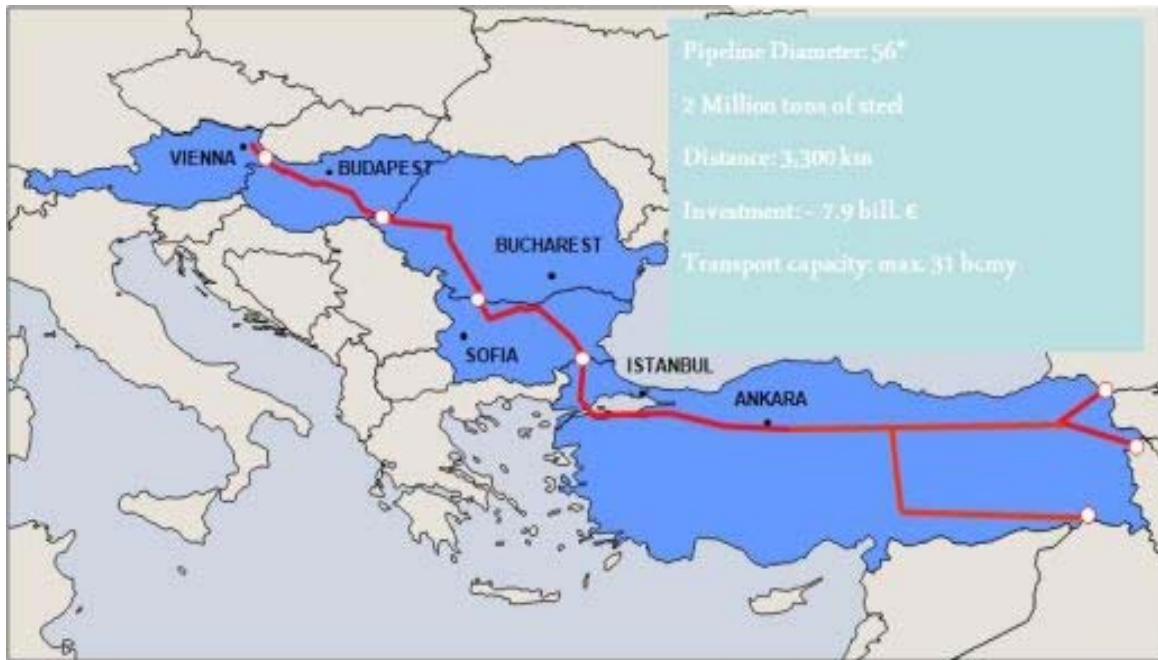


Figure 7. Nabucco Gas Pipeline Project. From: <http://nabucco-pipeline.com/project>

In July 2009, Turkey, Bulgaria, Romania, Hungary and Austria signed the intergovernmental agreement on the development of the Nabucco pipeline, which concluded the deliberations on the pipeline that started in 2002. The pipeline, with a capacity to transit 31 billion cubic meters of natural gas per year, from Erzurum in Turkey to Baumgarten in Austria, is scheduled to be complete by 2015. Some of the gas suppliers are expected to be Turkmenistan, Azerbaijan, and Iraq.⁵⁷

The United States supports the European Union's project in order to weaken Russia's position as a strategic energy supplier to the EU, and other parts of the world.

⁵⁶ Baku Declaration, "2nd International Conference on the Restoration of the Historic Silk Route," Sep 7–8, 1998, <http://www.internationaltransportforum.org/europe/ecmt/eurasia/pdf/DeclBaku98.pdf> (accessed Mar 14, 2010).

⁵⁷ "Questions about viability of Nabucco pipeline," Jan 30, 2010, <http://www.euronews.net/2010/01/30/questions-about-viability-of-nabucco-pipeline> (accessed Feb 5, 2010).

The U.S. also supports Caspian Sea basin countries in their struggle to diversify their energy export pipeline routes and markets without Russia's domination.

First among the challenges facing the EU project is the lack of an integrated energy policy in the EU. Member countries pursue their sovereign interests in their energy policies, and continue to negotiate bilaterally with Russia. Germany, Italy, Bulgaria, Romania, Hungary, Slovenia are participating also in Nabucco's rival pipeline project, the South Stream. The EU does not present itself as a bloc, which weakens its bargaining power against Russia. Accordingly, "fragmentation of the market into individual consumers plays into the hands of Gazprom. A unified EU could (and possibly still can in the future) negotiate for far better terms with Russia..."⁵⁸

Secondly, the supply of natural gas remains one of the main problems of Nabucco project. As Turkish Prime Minister Recep Tayyip Erdogan affirmed on Jan 30, 2010:

The European union has not dealt with the Nabucco Project seriously yet. The Nabucco project needs 30 billion cubic meters of natural gas every year. Could Nabucco find such a supply at the moment? No, it could not. There is no gas. There is no pipeline. So, what are we talking about?⁵⁹

The Russian-Ukrainian disputes of 2006 and 2009 jeopardized not only the gas supply to Europe, but on the flipside, Russia suffered losses in foreign exchange earnings, since 80 percent of its gas exports to Europe go through Ukrainian territory. Ukraine's divergence from Russia's sphere of interests after the dissolution of the Soviet Union caused a confrontation between the two countries that culminated in gas disputes and subsequent gas supply cut-offs.

In its diversification efforts, Russia announced new pipeline projects. It announced the South Stream natural gas pipeline project on June 23, 2007 (Figure 8) when the Chief Executive of Ente Nazionale Idrocarburi (ENI), the Italian oil and gas

⁵⁸ Anderson, "Europe's dependence on Russian Natural Gas: Perspectives and Recommendations for a Long-term Strategy," 42.

⁵⁹ Ibid.

company, Paolo Scaroni and the Vice-Chairman of Gazprom Management Committee, Alexander Medvedev signed a Memorandum of Understanding (MOU) in Rome.⁶⁰ The South Stream completion date is 2015.



Figure 8. South Stream pipeline project. From: <http://south-stream.info>

Russia's main purpose with the South Stream was to launch a rival project to the EU's gas pipeline project, Nabucco. Officially Bulgaria, Serbia, Greece, Turkey, and Slovenia participate in the South Stream project, following signed agreements with Russia. The pipeline will run from the Pochinski compressor station to the Beregovaya compressor station at the port of Dzughba, then under the Black Sea to Bulgaria's Varna. The route is planned to go through Turkey's waters to avoid the Ukrainian exclusive economic zone.⁶¹ The cost estimates for the project are between \$ 25.9 – 32.7 billion.⁶² Some scholars and experts are skeptical about the feasibility of the South Stream due to its enormous costs.

⁶⁰ Gazprom, "Gazprom and Eni Sign Memorandum of Understanding on South Stream Project" (Mar 12, 2009) <http://www.gazprom.com/press/news/2009/december/article72371/> (accessed Feb 10, 2010).

⁶¹ Oleg Mityayev, "South Stream's Russian gas for Europe" (RIA Novosti: Jan 29, 2009) <http://en.rian.ru/analysis/20090129/119794780.html> (accessed Feb 12, 2010).

⁶² Socor, "Gazprom Reveals Unaffordable Costs of South Stream Project" (Eurasia Daily Monitor: Feb 12, 2009) <http://en.rian.ru/analysis/20090129/119794780.htm> (accessed Mar 17, 2010).

The other Russian plan to circumvent Ukraine and Poland is the Nord Stream natural gas pipeline project (Figure 9), which will carry gas from Vyborg in Russia to Greifswald in Germany, with a capacity of 27.5 billion cubic meters per year.



Figure 9. Nord Stream pipeline project. From: Wikipedia,
<http://en.wikipedia.org/wiki/File:Nordstream.png>

Construction of the first line is slated for 2010–2011, and the second line for 2011–2012, with the first gas delivery expected in 2011. Due to the complexity of the pipeline construction under the Baltic Sea, the estimated cost of the project lies in the range of \$8-12 billion.⁶³ Politically, Nord Stream increases Europe’s dependence on Russia’s gas supplies. The present transit countries of Ukraine, Belarus, Poland and Slovakia are concerned with Russia’s Nord Stream plan, as it will circumvent their

⁶³ Judy Dempsey, “Gazprom plans to re-route controversial European pipeline” (International Herald Tribune: Aug 23, 2007) <http://www.ihf.com/articles/2007/08/23/news/pipeline.php?page=1> (accessed Mar 15, 2010) & Tom Kaeckenhoff and Tanya Moslova, “Nord stream to hike cost estimates in early 2008,” (Reuters: Dec 13, 2007) <http://uk.reuters.com/article/idUKL1368466120071213?symbol=EONG.DE> (accessed Feb 10, 2010).

territory with consequent revenue losses. In addition, the realization of the project enables the Kremlin to threaten Ukraine and Belarus without jeopardizing its gas supplies to Europe.

As the EU attempts to reduce its gas dependence on Russia, Central Asian gas producers like Uzbekistan, Kazakhstan, and especially Turkmenistan, also try to reduce their dependence on Russia's natural gas pipelines. In December 2009, these countries formally opened a 7,000 km natural gas pipeline running from Turkmenistan through Uzbekistan and Kazakhstan to China's Xinjiang region, and into China's interior and eastern coast.⁶⁴ China's National Petroleum Corporation finances the pipeline.⁶⁵ The Turkmenistan and China gas pipeline integrates Central Asia and China in the energy reserves and transit. This allows China to receive gas from the three gas producers of Central Asia.

The realization of the Turkmenistan–China project could modify the power dynamics in the Caspian Sea region to the disadvantage of Russia, and to an advantage to China, Turkmenistan, Kazakhstan, and Uzbekistan. Turkmenistan, for instance, will be able to overcome Russia's control over its exports through Russian pipelines with occasional dictates of natural gas prices below market value. Blank argues that:

Moscow has consistently forced Turkmenistan to export its gas through the only available pipelines, which were Russian, and at prices well below its market value. In November 2009, Moscow also reduced the amount of Turkmen gas that it would import in 2010, and wanted to pay Turkmenistan about \$220-240 tcm, the same price it is trying to obtain from Uzbekistan and Kazakhstan. But Turkmenistan defeated Russia's plan. Employed its new leverage with China to obtain a \$3 billion loan from Beijing for development of Turkmenistan's South Yolotan gas fields. In return, Turkmenistan subsequently raised the amount of gas it committed to export to China through the pipeline from 30 bcm to 40 bcm. China's willingness to assist Turkmenistan escape from Russia's hold on

⁶⁴ Socor, "China to Increase Gas Imports From 'Economically Complementary' Turkmenistan."

⁶⁵ Stephen Blank, "The strategic Implications of the Turkmenistan-China Pipeline Project," (Intelligence Quarterly: Feb 16, 2010) <http://www.intelligencequarterly.com/> (accessed Mar 14, 2010).

Turkmen energy supply has clearly paid for Beijing. This episode clearly demonstrates that China is prepared to counter Russia in Central Asia, a trend that could have major future implications.⁶⁶

By 2012, when Central Asia–China pipelines are completed, China will be a key importer of Caspian Sea resources, posing a challenge to the EU. Already, China’s “siphoning off” of Turkmenistan gas spells doom to the EU’s Nabucco project, the realization of which depends on the availability of Caspian gas reserves, with Turkmenistan as a major contributor.

⁶⁶ Blank, “The strategic Implications of the Turkmenistan-China Pipeline Project.”

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IV. RUSSIA'S ROLE

A. RELATIONS BETWEEN RUSSIA AND THE CENTRAL ASIAN AND THE CAUCASIAN COUNTRIES

A document signed on 8 December 1991 in Belavezhskaya Pushcha, Belarus, declared not only the dissolution of the Soviet Union, but also established the Commonwealth of Independent States (CIS). The document was signed by Boris Yeltsin, President of the Russian Federation, Leonid Kravchuk, President of Ukraine, and Stanislau Shuskevich, Chairman of the Supreme Soviet (speaker of the parliament) of the Republic of Belarus. Subsequent to this declaration, eight former Soviet Republics—Armenia, Azerbaijan, Kyrgyzstan, Turkmenistan, Kazakhstan, Uzbekistan, Tajikistan and Moldova—joined the CIS on 21 December 1991, with Georgia joining in later in 1993. Thus, twelve of the fifteen former Soviet Republics became members of the CIS.⁶⁷

At that time, the Russian elite did not care about the loss of the Russian periphery because they were preoccupied with internal problems of the Russian Federation. Later Moscow looked with growing discomfort at the activity of Iran and Turkey in Central Asia, but none of these states could become a serious regional rival of Russia.

Since 1993, Russia has claimed privileged political relations with the states of the former Soviet periphery in her foreign affairs policy. Andranik Migranjan, a Russian political commentator, developed the idea that the CIS region is “the zone of vital Russian interests,” where Moscow should have prerogatives (Figure 10). This is the main idea of the “Russian Monroe Doctrine,” which became part of the Russian official perception. However, Russia did not have enough economic and political tools to realize her ambitions towards the Russian periphery. At this time, the West also abstained from “entering” into the conflicts of the post-Soviet region.⁶⁸

⁶⁷ Commonwealth of Independent States, <http://www.cisstat.com/eng/cis.htm> (accessed Sep 23, 2009).

⁶⁸ Sz. Bíró Zoltán, “A FÁK-térség: az integráció politikai esélyei” (The CIS-area: Political Chances of the Integration, 2008) www.fakprojekt.hu/index.php? (accessed Sep 23, 2009).



Figure 10. Russia's periphery. From: Strategic Forecasting, Inc., www.stratfor.com

From 1995 on, Russia has tried to force the economic integration of the CIS countries amid growing resistance from these countries. The reason for resistance was that the different CIS countries perceived differently the intensity of their relations with Moscow. The closest allies were Belarus, Kazakhstan, and Kyrgyzstan, and they were ready to establish closer cooperation with Russia. Georgia, Azerbaijan, Uzbekistan and Ukraine, however, started to orientate towards NATO and the West.

The first attempt by the former Soviet territory for regional cooperation between newly independent states to compensate for the political, economic and military dominance of Russia was the formation of a political, economic and strategic alliance, namely the GUAM Group (Georgia, Ukraine, Azerbaijan, Moldova and Uzbekistan) in 1997.⁶⁹ GUAM countries formulated their statement in “joint efforts on behalf of energy production”; in order to “support sovereignty and territorial integrity”; “oppose ethnic and religious intolerance”; further “cooperation in the field of security”; and pledged to

⁶⁹ Uzbekistan left the GUUAM in May 2005 after the Western criticism regarding the murdering in city of Andijon.

work with NATO, OSCE, the United Nations and the United States.⁷⁰ The main purpose was to assure transportation of the Caspian energy supplies on routes that circumvent Russia. They realized that if they reinforced their economies based upon the energy, they could draw off Russian economic, energy and political dominance.⁷¹

Putin's internal stabilization since 2003 had crucial consequences for the policy towards the Russian "near abroad" (CIS countries). The notable rise in the price of oil, due to the United States invasion of Iraq in 2003, led to the revival of the Russian economy. The economic recovery has had political consequences and born fruits for Moscow as well. The Russian elite started an important turn in 2003; the heart of this shift is the intention to compensate the strategic deficit of the 1990s. Russia's democracy in Putin/Medvedev's tenure keeps drifting toward an authoritarian modernization in which Russia independently decides its destiny, in contrast to Yeltsin's period, when the West pushed Russia to adopt Western political values. The philosophy of Russia's present regime manifests itself in the country's foreign policy to gain influence in its lost satellite states.

Russia's determination to regain control over its lost territories met with a "serious threat," the so called "color revolutions" between 2003 and 2005: Georgia's "Rose Revolution" in 2003, Ukraine's "Orange Revolution" in 2004 and Kyrgyzstan's "Tulip Revolution" in 2005. The color revolutions changed the political leaderships in Ukraine, Georgia, and Kyrgyzstan, and encouraged Western-oriented governments. However, the "color revolutions" did not succeed in Armenia and Azerbaijan. Russia contends that the revolutions were part of Western/U.S. expansion in Russia's zone of interest, because these revolutions occurred as a result of pro-Western and pro-American democratic movements in these countries, encouraged by the U.S. After the "Orange Revolution" in Ukraine, Moscow started to organize a retort. Among the consequences of

⁷⁰ The GUUAM Group: History and Principles (Nov 2000), <http://www.guam.org/general/browse.html> (accessed Sep 22, 2009).

⁷¹ Sz. Bíró Zoltán. "A FÁK-térség: az integráció politikai esélyei" (The CIS-area: Political Chances of the Integration), 2008 www.fakprojekt.hu/index.php? (accessed Sep 23, 2009).

the “color revolutions” were the deterioration of Russian-Western relations and the emergence of a new Russian policy towards the Western-oriented CIS countries such as Ukraine, and Georgia.

Recently, Russia regained some influence in its lost territories. In Ukraine, a pro-Russian president, Viktor Yanukovich, initiated close ties with Russia, following his election in February 2010. Yanukovich’s efforts are evident in his promise to allow the Russian Black Sea Fleet in Ukrainian waters, and a commitment that Ukraine will not seek NATO membership, although it will continue to move toward EU membership.⁷² Another key success for Russia occurred in April 2010 in Kyrgyzstan, where pro-Russian opposition forces deposed the pro-Western president, Kurmanbek Bakiyev, and formed a new interim government.⁷³ As Lauren Goodrich affirms, opposition groups never were able to make such a successful revolution “until Russia became involved.”⁷⁴ However, Kyrgyzstan has no strategic resources, but its importance to Russia lies in its geostrategic position. The Tien Shan Mountains in Central Asia act as a natural barrier between Russia, and South Asia and China. Within the Tien Shan Mountains lies the core of Central Asia—the Fergana Valley. During the Soviet times, the Fergana Valley was divided between the three Republics of Uzbekistan, Tajikistan and Kyrgyzstan.

Control of Kyrgyzstan equals control of the valley, and hence of Central Asia’s core. . . . The Kyrgyz location in the Tien Shan also gives Kyrgyzstan the ability to monitor Chinese moves in the region. And its highlands also overlook China’s Tarim Basin, part of the Contentious Xinjiang Uighur Autonomous Region. Given its strategic location, control of Kyrgyzstan offers the ability to pressure Kazakhstan, Uzbekistan, Tajikistan and China. Kyrgyzstan is thus a critical piece in Russia’s overall plan to resurge into its former Soviet sphere.⁷⁵

⁷² Kyle Atwell, “Yanukovich: Ukraine will be a bridge between East and West,” (Atlantic Review), Feb 19, 2010, <http://atlanticreview.org/archives/1367> (accessed Mar 16, 2010).

⁷³ BBC News, “Kyrgyz President Bakiyev ‘will resign if safe’,” Apr 13, 2010, <http://news.bbc.co.uk/2/hi/8617729.stm> (accessed Apr 16, 2010).

⁷⁴ Kyrgyz opposition members before the revolution visited Moscow, and met Russian Prime Minister Vladimir Putin. Endorse Lauren Goodrich, “Kyrgyzstan and the Russian Resurgence” (Stratfor Global Intelligence), Apr 13, 2010, http://www.stratfor.com/weekly/20100412_kyrgyzstan_and_russian_resurgence?ip_auth_redirect=1 (accessed Apr 16, 2010).

⁷⁵ Goodrich, “Kyrgyzstan and the Russian Resurgence,” 2, 3.

Historically, Russia's national security and defense have always been based on expansion and the creation of buffer zones between itself and other powers. In this strategy, the mountains—the Carpathians, the Caucasus and the Tien Shan—continue to play a key role. The Carpathians, which incorporate Ukraine, Moldova, and parts of Romania, create a natural barrier between Russia and Europe. This explains the importance of Ukraine and Moldova for Russia. The Caucasus form a natural barrier between Russia and regional powers such as Iran and Turkey.⁷⁶ Russia's control over the Caucasus, "also means controlling Russia's Muslim regions (like Chechnya, Ingushetia, and Dagestan), as well as Georgia, Armenia and Azerbaijan."⁷⁷

In the past few years, Russia's focus has been to gradually reduce Western/American presence from its buffer zones, the former Soviet countries. Russia's strategy entails the use of political pressure, economic sanctions, reinforcing social instability, direct military intervention, and promotion of energy connections.

B. RUSSIA'S "ENERGY WEAPON" TO STRENGTHEN ITS INFLUENCE

Following the dissolution of the Soviet Union in 1991, Russia lost its superpower prestige in the world. In the Yeltsin presidential era, economic reforms and Western-backed policies ruined the living standards of much of the Russian population, along with the welfare subsidies of the Soviet era. During the 1990s, Russia's GDP decreased by 50 percent, hyperinflation led to increased poverty, and unemployment emerged as a new phenomenon. Russia suffered an economic downturn in the 1990s, comparatively worse than the economic setbacks suffered by the U.S. in the 1930's Great Depression.

During his two-term presidency between 2000 and 2008, Putin consolidated the Russian economy and internal policy. Unlike Yeltsin's oligarchic capitalism, Putin's policy was supported by the Russian society. The support to Putin's policy resulted from

⁷⁶ Goodrich, "Kyrgyzstan and the Russian Resurgence," 3, 4.

⁷⁷ Ibid., 4.

the Russian elite's initiative to keep the social peace by apportioning oil and gas revenue incomes to the society. At the same time, salaries of workers or employees were paid on time, and the average wages were doubled.

With Russia, holding the largest natural gas reserves in the world, constituting more than 30 percent of the world's total⁷⁸ (Figure 11), the revival of its economy in the early the 2000s, owed much to rising revenues from hydrocarbon exports, mostly to Europe. More than 30 percent of the income for the federal budget comes from the export of oil and gas. The instability in the Middle East that followed the Iraqi war has led to permanently high oil prices, sustaining the Russian economy.

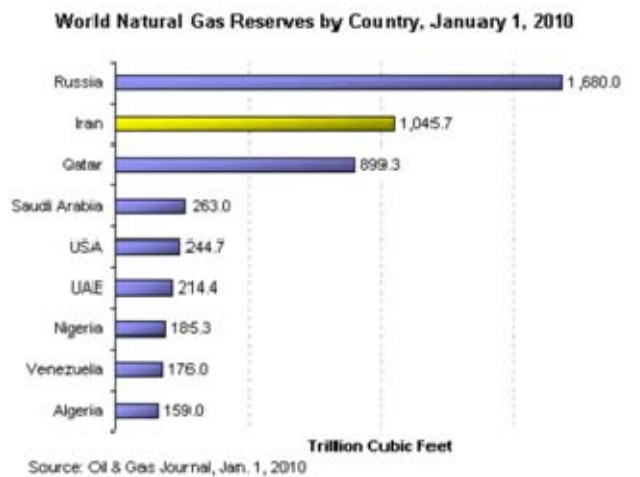


Figure 11. World's Gas Reserves by Country. From: Oil & Gas Journal, Jan 1, 2010

The economic recovery of Russia has also had political consequences. In attempting to compensate the strategic deficit of the 1990s, Russia tries to reinforce control over its lost areas, hedging out NATO, the U.S. or other rival powers from its declared sphere of interests—the “near abroad.” As evidence of Russia's consideration of hydrocarbon reserves as a political tool to regaining its lost superpower glory, its

⁷⁸ Congressional Research Service, “Russian Political, Economic, and Security Issues and U.S. Interests,” Jan 29, 2010, 14. <http://www.crs.gov> (accessed Mar 2, 2010).

“National Security Strategy to 2020,” published in 2009, which stated that the resource potential of Russia “has expanded the possibilities of the Russian Federation to strengthen its influence in the world arena.”⁷⁹

To realize his vision that “gas and oil money will play a virtual role in financing not only the military, but also social programs and infrastructure,”⁸⁰ Putin executed a strategy of state control over hydrocarbon reserves and their exploitation. In a systematic reduction of foreign investments, Russia’s government monopolized the gas industry.

Gazprom, a 50 percent state-owned gas company, is Russia’s major tool to regain its lost status in the international scene. It is one of the three largest corporations in the world. With a 50 percent stake, “the [Russian] government exercises a deciding voice on virtually all corporate matters.”⁸¹ Apart from monopolizing Russia’s Unified Gas Transportation System, Gazprom owns 60 percent of Russia’s gas resources, and has exclusive rights to export natural gas from Russia.⁸²

Gazprom’s strategic policy is to strengthen connections with political leaders of key transit and consuming states, and to expand its ownership of gas fields abroad (in Bulgaria, Estonia, Greece, Hungary, Latvia, Lithuania, Moldova, Ukraine, Poland, Slovak Republic, and Belarus).⁸³ For example, Gerhard Schroeder, former Chancellor of Germany, became the head of the shareholders’ committee of the Nord Stream AG after leaving his post as a Chancellor. Gazprom offered the position of chairman of South Stream AG to former Italian Prime Minister Romano Prodi, who refused this offer.⁸⁴ It also has minority share holdings in Western European corporations’ storage facilities and gas pipelines (of France, the United Kingdom, Italy, and Germany). In the words of

⁷⁹ “National Security strategy to 2020,” <http://scrf.gov.ru/documents/99.html> (accessed Mar 7, 2010).

⁸⁰ Anderson, “Europe’s dependence on Russian Natural Gas: Perspectives and Recommendations for a Long-term Strategy,” 16, 17.

⁸¹ Ibid., 17.

⁸² Ibid, 11.

⁸³ Ibid, 17.

⁸⁴ Judy Dempsey, “Gazprom courts as pipeline chief” (International Herald Tribune: Apr 28, 2008) <http://www.nytimes.com/marketing/ihl/search/?iht> (accessed Mar 16, 2010).

Anderson, “Gazprom’s downstream ownership in the gas distribution networks is a critical part of the strategy to dominate the European market.”⁸⁵

By using its gas resources for political gain, Russia has increased gas prices for Georgia and Ukraine in order to penalize their drifting towards NATO and the U.S. Meanwhile, the loyal Armenia and Belarus continue to receive Russian gas at reduced price—\$180 and \$171.5 per thousand cubic meters—which is far below the international average price of \$300,⁸⁶ exhibiting a direct correlation between gas prices and level of loyalty. Most recently, the governments of Russia and Ukraine approved a new gas agreement based on the proposals of Ukrainian President Viktor Yanukovich, with the goal of reducing the current price of \$305, set by the two countries in their agreement of Jan 19, 2009, after the gas crisis.⁸⁷ Ukraine also understands the negative economic and political impact it will suffer should Russia and the EU realize the Nord Stream, South Stream, and Nabucco pipeline projects.

⁸⁵ Dempsey, “Gazprom courts as pipeline chief,” 25.

⁸⁶ “Russian Gas Price For Armenia To Rise Further,” Apr 7, 2010 <http://www.armeniadiaspora.com/news> (accessed Apr 17, 2010); “Avg annual Russian gas price for Belarus \$171.5 per 1,000 m3 in 2010,” <http://www.interfax.com> (accessed Apr 17, 2010).

⁸⁷ “Ukraine satisfied with Russian gas prices negotiations,” Apr 16, 2010, <http://en.rian.ru/exsoviet/> (accessed Apr 17, 2010).

V. CONCLUSIONS

Natural gas constitutes a key energy source in the world's industrial sector and electricity generation, a trend predicted to continue through 2030. Natural gas is less expensive than the liquefied natural gas (LNG) or renewable energy sources, and produces less carbon dioxide than petroleum or coal. These factors continue to contribute to its wide range of use.

This trend raises the international importance of regions that possess huge natural gas reserves, among them, the Caspian Sea basin. Eurasia—due to the Russian and Central Asian resources—has the second biggest natural gas reserves after the Middle East. The international attention towards the Caspian Sea basin is primarily due to its hydrocarbon reserves, which most countries view as an important source for diversification of their growing energy demand. Because of the Caspian Sea geographic location, Europe, the U.S., and China are interested in the Caspian gas resources.

After becoming independent, Turkmenistan, Kazakhstan, Uzbekistan and Azerbaijan realized the importance of their hydrocarbon wealth and began to develop their national hydrocarbon industries—with the help of foreign investments in the gas and oil sector. The development of these nation-states, on the one hand, is directly related to the economic support of Russia and, on the other hand, their energy supplies oil and gas transportation routes to the markets.

At the same time, there are several factors that complicate the extraction of the Caspian Sea basin natural gas reserves. Territorial disputes over the natural gas fields, such as the unsettled legal status of the Caspian Sea, discourage foreign companies from investing in the extraction of the Caspian reserves. The political instability delays the realization of the pipeline projects from the region to the world's markets. Deficiencies in democracy, as well as frozen and acute ethnic conflicts, interstate wars, and religious tensions in the Caucasian and Central Asian countries—which are partly the heredity of the Soviet regime—remain unresolved.

The development of the Caspian Sea region is further complicated by the recent appearance of world power rivalries over the energy resources. Through 2030, the primary energy demand is expected to grow by 1.5 percent per year, with an overall increase of 40 percent. With the trend in world energy demands, China's energy imports will exceed the U.S. imports by 2025, making China the world's third-largest importer of energy. The Association of Southeast Asia Nations (ASEAN) growth rate of 2.5 percent is faster than the rest of the world, due to its rapid economic and population growth, urbanization, and industrialization. Insufficient and declining European natural gas supplies on the one hand, and the increasing energy demand on the other, make the European Union one of the main competitors for the Caspian natural gas supplies. Since 2000, the EU has embarked on the development of a common energy policy, with the purpose of avoiding strategic dependence on Russia's natural gas.

However, the North American demand of natural gas could fall because of its unconventional gas production since 2006. Nonetheless, for the United States the value of the Caspian Sea basin and Central Asia for the United States continues to be geostrategic: close to Iran, Afghanistan, Pakistan; and in addition, located in the Russian sphere of interest.

The EU, U.S., China, and Russia rivalry has transformed Central Asia and the Caucasus to a terrain of energy resource struggles. Moreover, there is a rivalry over the pipeline routes to transport the Caspian Sea natural gas to markets. Russian gas is transported to Europe through the ex-Soviet pipeline network, and 80 percent of this gas goes through Ukraine. The Russian-Ukrainian confrontation in the post-Cold War era, with continuous gas disputes between Moscow and Kiev, accompanied by cuts of gas supplies going through Ukraine, endangers European energy security.

The unreliability of the supply and transportation of natural gas has forced both Russia and the European Union to plan new pipeline projects—Nabucco, Nord Stream, and South Stream—in addition to the existing transit routes. The EU's plan is to reduce dependence on Russia's gas supplies, while Russia is determined to circumvent the insecure supply routes running through Ukraine. Nabucco is the European Union's

official project, while Russia is the main stakeholder for the Nord Stream and South Stream pipeline projects. South Stream is a rival project to Nabucco, launched by Russia to impede the European Union's pipeline plan.

However, among the challenges facing the EU project is the lack of an integrated energy policy in the EU. Member countries pursue sovereign interests in their energy policies and continue to negotiate bilaterally with Russia. Germany, Italy, Bulgaria, Romania, Hungary, and Slovenia are also participating in Nabucco's rival pipeline project, the South Stream.

Both the EU and Russia face an increasingly strong competitor in the Caspian Sea basin: China. The realization of a Turkmenistan–China project could modify the power dynamics in the Caspian Sea region to the disadvantage of Russia, with an advantage to China, Turkmenistan, Kazakhstan, and Uzbekistan. By 2012, when the Central Asia–China pipelines are completed, China will be a key importer of Caspian Sea natural gas, posing a challenge to the EU. Already, China's "siphoning off" of Turkmenistan gas spells doom to the EU's Nabucco project, the realization of which depends on the availability of Caspian gas reserves in which Turkmenistan is a major contributor.

The key player in this geopolitical game over the Caspian Sea natural gas supply and transportation routes is Russia, which has recently had important successes in its "near abroad," the zone of vital Russian interests. The support of South Ossetia's and Abkhazia's secessionist ambitions, and victory in the Russia–Georgia war of 2008, significantly weakened the "disobedient" Georgia. The recent election of a pro-Russian president in Ukraine—and most recently, the ousting of the Western-oriented government and the pro-Russian revolt in Kyrgyzstan—"returned" to the Russian "breast" the most Western-oriented post-Soviet countries.

Moreover, by owning the largest natural gas reserves in the world, Russia continues to use these reserves, not only for economic gains, but for political purposes: to regain its lost status in the international scene. Russia's leverage rests on its state control over hydrocarbon reserves, and their export and transportation. Gazprom uses gas prices to penalize or reward the level of loyalty of the Commonwealth of Independent States towards Moscow.

In the face of strong competitors such as China, and increasing Russian strength in international politics, the European Union could secure its energy security through:

- Maintaining of strategic relations with Russia.
- Advancing an integrated energy policy and forming a unified natural gas market. While EU member states presently have different interests regarding energy security, Hungary's intention to make energy security a primary focus in the EU's agenda during its presidency in the first half of 2011 is expected to unite the EU against Russia's strategies.
- Seeking alternative energy supplies to Russia's energy supplies and transportation system. The Caspian Sea basin natural gas reserves and the realization of the Southern Energy Corridor are the EU's options. The EU's pursuit of development of LNG terminals and renewable energy support the reduction of its dependence on Russia.

LIST OF REFERENCES

- Anderson, J. Richard. "Europe's Dependence on Russian Natural Gas: Perspectives and Recommendations for a Long-Term Strategy." George C. Marshall European Center for Security Studies Occasional Paper series, No. 19, (Sep 2008).
- ASEAN Member States. <http://www.aseansec.org> (Accessed Mar 5, 2010).
- Atwell, Kyle. "Yanukovich: Ukraine will be a ridge between East and West" *Atlantic Review*, Feb 19, 2010, <http://atlanticreview.org/archives/1367> (Accessed Mar 16, 2010).
- "Avg annual Russian gas price for Belarus \$171.5 per 1,000 m3 in 2010," <http://www.interfax.com> (Accessed Apr 17, 2010).
- "Az új orosz nagykövet egyelőre nem megy Kijevbe (The new Russian Ambassador temporarily does not go to Kiev)" (MTI, 2009), http://www.echotv.hu/index.php?akt_menu=73&newsid=128414 (Accessed Sep 15, 2009).
- Baku Declaration. "2nd International Conference on the Restoration of the Historic Silk Route," Sep 7–8, 1998, <http://www.internationaltransportforum.org/europe/ecmt/eurasia/pdf/DeclBaku98.pdf> (Accessed Mar 14, 2010).
- BBC News. "European Gas Supply Disrupted" (BBC News, Jan 6, 2009). <http://news.bbc.co.uk/2/hi/europe/7812860.stm> (Accessed Feb 16, 2009).
- Blank, Stephen. "The strategic Implications of the Turkmenistan-China Pipeline Project" (Intelligence Quarterly: Feb 16, 2010) <http://www.intelligencequarterly.com/> (Accessed Mar 14, 2010).
- "BP Statistical Review of World Energy" (June 2008). http://www.bp.com/liveassets/bp_internet/globalbp/globalbp_uk_english/reports_and_publications/statistical_energy_review_2008/STAGING/local_assets/2009_downloads/statistical_review_of_world_energy_full_report_2009.pdf (Accessed Feb 18, 2010).
- Cohen, Ariel. "Iran's Claim Over Caspian Sea Resources Threaten Energy Security" (The Heritage Foundation Sep 5, 2002). <http://www.heritage.org/research/iraq/bg582.cfm> (Accessed Jan 12, 2010).
- Commonwealth of Independent States. <http://www.cisstat.com/eng/cis.htm> (Accessed Sep 23, 2009).

- Dempsey, Judy. "Gazprom courts as pipeline chief" (*International Herald Tribune*: Apr 28, 2008) <http://www.ihrt.com/articles/2008/04/bisuness/gazprom.php> (Accessed Mar 16, 2010).
- . "Gazprom plans to re-route controversial European pipeline" (*International Herald Tribune*: Aug 23, 2007) <http://www.ihrt.com/articles/2007/08/23/news/pipeline.php?page=1> (Accessed Mar 15, 2010)
- Europe's Energy Portal. "Energy Dependency" <http://www.energy.eu/#dependency> (Accessed Dec 26, 2010)
- Gazprom. "Gazprom and Eni Sign Memorandum of Understanding on South Stream Project" (Mar 12, 2009) <http://www.gazprom.compress/news/2009/december/article72371/> (Accessed Feb 10, 2010).
- Goodrich, Lauren. "Kyrgyzstan and the Russian Resurgence" (Stratfor Global Intelligence, Apr 13, 2010) http://www.stratfor.com/weekly/20100412_kyrgyzstan_and_russian_resurgence?p_auth_redirect=1 (Accessed Apr 16, 2010).
- The GUUAM Group: History and Principles. Nov 2000. <http://www.guuam.org/general/browse.html> (Accessed Sep 22, 2009).
- "The History of the European Union," http://europa.eu/abc/history/index_en.htm (Accessed Mar 13, 2010).
- Horpikirk, Peter. "The Great Game: The Struggle for Empire in Central Asia" (Kodansha International, 1992).
- International Energy Agency. "World Energy Outlook 2009," 5–6. http://wordenergyoutlook.org/docs/weo2009/WEO2009_es_english.pdf (Accessed Mar 6, 2010).
- Kaeckenhoff, Tom & Moslova, Tanya. "Nord stream to hike cost estimates in early 2008" (Reuters: Dec 13, 2007) <http://uk.reuters.com/article> (Accessed Feb 10, 2010).
- Katona, Magda. "A terrorizmus jelenségének főbb okai és megszüntetésének lehetőségei" (Main Reasons for Terrorism, and Possibilities of its Cessation). Eszmélet Folyóirat. www.freeweb.hu/eszmelet/53/katona53.htm (Accessed Sep 19, 2009).
- Klare, T. Michael. *Resource Wars: The New Landscape of Global Conflict* (Henry Holt & Company: New York, 2001).

- Kosa, Andras. “Ujrajatszas? – Megint haboru johet a Kaukazusban” (Replay? – War could come again to the Caucasus), Feb 26, 2010,
http://www.hirszerto.hu/cikk.ujrajatszas_-megint_haboru_johet_a_kaukazusban.141687.html (Accessed Feb 27, 2010).
- Ludvig, Zsuzsa. “Az Európai Unió és a FÁK-országok közötti ‘energiadialogusok’ – Fókuszban a szénhidrogén szállítások (‘Energy dialogues’ between the European Union and CIS countries – in focus hydrocarbon’s transportation),”
http://www.vki3.vki.hu/kke_4_ludvig.pdf (Accessed Jan 25, 2010).
- Makkay, Lilla. “Élénkülő forgalom a selyemúton, avagy a “Nagy Játzsma” újabb fejezete Közép-Ázsiában” (Renewed Trade on the Silk Road or The Newest Chapter of the “Great game” in Central Asia). www.kulugyiintezet.hu/kszpdf/2009/144-165_KSz2009_01.pdf (Accessed Sep 17, 2009).
- Mityayev, Oleg. “South Stream’s Russian Gas for Europe” (RIA Novosti: Jan 29, 2009).
<http://en.rian.ru/analysis/20090129/119794780.html> (Accessed Feb 12, 2010).
- “National Security strategy to 2020,” <http://scrf.gov.ru/documents/99.html> (Accessed Mar 7, 2010).
- Orujov, R. “Security on the Caspian Sea,” *The Azeri Times*. (Feb 12, 2010).
<http://www.theazeritimes.com/site/economy/3445> (Accessed Feb 19, 2010).
- “Questions about Viability of Nabucco Pipeline,” Jan 30, 2010,
<http://www.euronews.net/2010/01/30/questions-about-viability-of-nabucco-pipeline> (Accessed Feb 5, 2010).
- “Russian Gas Price For Armenia To Rise Further,” Apr 7, 2010.
<http://www.armeniadiaspora.com/news> (Accessed Apr 17, 2010).
- Smith, Keith C. “Russia-Europe Energy Relations: Implications for U.S. Policy” (CSIS: Feb 2010), 5. <http://www.csis.org> (Accessed Mar 10, 2010).
- Socor, Vladimir. “Gazprom Reveals Unaffordable Costs of South Stream Project” (*Eurasia Daily Monitor*: Feb 12, 2009)
<http://en.rian.ru/analysis/20090129/119794780.htm> (Accessed Mar 17, 2010).
- . “11 countries in Central, Southern Europe hold energy summit,” (Moldova.org: Mar 3, 2010) <http://economie.moldova.org/news/> (Accessed Apr 17, 2010).
- . “China to Increase Gas Imports from ‘Economically Complementary’ Turkmenistan” (The Jamestown Foundation: Jun 30, 2009)
<http://www.http://www.jamestown.org/> (Accessed Mar 3, 2010).

Sz. Bíró, Zoltán. “A FÁK-térség: az integráció politikai esélyei” (The CIS-area: Political Chances of the Integration), 2008. www.fakprojekt.hu/index.php? (Accessed Sep 23, 2009).

“Ukraine satisfied with Russian gas prices negotiations.” Apr 16, 2010.
<http://en.rian.ru/exsoviet/> (Accessed Apr 17, 2010).

U.S. Energy Information Administration Independent Statistics and Analysis.
“International Energy Outlook” (May 27, 2009).
http://www.eia.doe.gov/oiaf/ieo/nat_gas.html (Accessed Feb 10, 2010).

U.S. Energy Information Administration. “Caspian Sea Region,”
<http://caspianenergy.com/s/caspianenergy1/> (Accessed Feb 19, 2010).

———. “International Energy Outlook 2009,” http://www.eia.doe.gov/ieo/nat_gas.html
(accessed Jan 6, 2010).

Yergin, Daniel. “Ensuring Energy Security” *Foreign Affairs* 85 (Mar/Apr 2006).
<http://proquest.umi.com.libproxy.nps.navy.mil/pqdweb?index=2&sid=3&srchmo>
(Accessed Sep 15, 2009).

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